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## CAN WE DOMINATE IN AN URBAN ENVIRONMENT

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**JCSP 43 DL**

***Exercise Solo Flight***

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CANADIAN FORCES COLLEGE – COLLÈGE DES FORCES CANADIENNES  
JCSP 43 DL – PCEMI 43 AD  
2017 – 2018

EXERCISE *SOLO FLIGHT* – EXERCICE *SOLO FLIGHT*

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Word Count: 3236

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## CAN WE DOMINATE IN AN URBAN ENVIRONMENT

### INTRODUCTION

The world continues to evolve and change as the age of globalization and the ability to be even more connected across continents. In the 1950's most of the populations lived in rural areas approximately two-thirds rural and one-third urban. It is currently estimated that by 2050 the world will see a demographic switch where two-thirds will live in urban cities and one-third in rural areas. This massive movement of the world's population from the countryside to the city represents a revolution of historic magnitude. With these mass city growths, an intense debate over the future of the economic structure and geopolitical stability has occurred with both visions of dystopia and utopia being argued. Many urban specialists foresee this shift to city living as possible solutions to alleviate long-term poverty and political instability in diverse countries such as Asia, Latin America, parts of the Middle East and Africa. Urbanization is seen "as a means of strengthening the three pillars of sustainable development: economic growth, social stability and environmental protection."<sup>1</sup>

Three countries, India, China and Nigeria are expected to account for 37% of the urban growth between now and 2050. "By the early 2030s, some \$30 trillion or 65% of global gross domestic product (GDP) will be generated by some 600 cities, over a third of which will be in the developing world."<sup>2</sup> What is unique about these rapidly growing developing countries is that they will not likely follow any single pattern of growth. There will be no 'single future of cities'

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<sup>1</sup> Michael Evans, "Future war in cities: Urbanization's challenge to strategic studies in the 21st century." *International Review of the Red Cross* 98, Iss. 1, (2016), 39-40.

<sup>2</sup> *Ibid.*, 41.

or one urban development program that works for all. The science of cities is still an analytical field in its infancy which makes clarity of concepts hard to conceptualize. Yet, cities today can be simultaneously a place of safety, resilience and opportunity but equally a place of violence, inequality and squalor.<sup>3</sup>

With urbanization occurring at a rapid pace, pressures in conflict-affected countries also have increased concerns about the cities vulnerabilities to armed conflict. Armed conflict in the 21<sup>st</sup> century has changed over time, where “full-scale use of military power in cities remains as destructive today as it has ever been, international organizations such as the United Nations have called for changed approaches to state tactics in urban areas.”<sup>4</sup> Some of the key concerns with the use of military power in cities are the massive innocent civilian casualties, economic damages and the vulnerability to developing-world cities potential for low-intensity forms of violence by non-state actors.<sup>5</sup>

Some strategic literature and official military documents outline a grim outlook for the future of mega-cities where poor governance in urban cities are a perfect breeding ground for organized crime, terrorism, and other forms of violence.<sup>6</sup> Some would even define the sprawling urban environment as a feral city that is a “petri dish of both ancient and new diseases, a territory where the rule of law has long been replaced by near anarchy in which the only security available is that which is attained through brute power.”<sup>7</sup> The overall conclusion being that a

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<sup>3</sup> *Ibid.*, 41.

<sup>4</sup> Antonio Sampaio, “Before and after urban warfare: Conflict prevention and transitions in cities,” *International Review of the Red Cross* 98, Iss. 1, (2016), 71.

<sup>5</sup> *Ibid.*, 71.

<sup>6</sup> Alex Ward, “Battleground Metropolis” the future of Urban Warfare”, *National Interest*, 24 March 2015, <http://nationalinterest.org/feature/battleground-metropolis-the-future-urban-warfare-12467>

<sup>7</sup> Richard J. Norton, “Feral cities”, *Naval War College Review*, Vol. 56, No. 4. (2003), 1. [digital-commons.usnwc.edu/cgi/viewcontent.cgi?article=2342&context=nwc-review](http://digital-commons.usnwc.edu/cgi/viewcontent.cgi?article=2342&context=nwc-review)

high-intensity destructive military operation will be required to douse this ‘anarchic’ aspect of urbanization.

This paper will demonstrate that Western military forces will be unable to dominate in an urban environment because the cost of technology, equipment and lives are too high and there are alternative preventative methods that should be explored and incorporated into urban warfare doctrine.

## **URBANIZATION**

The rapid pace of urban population growth in many of the developing regions has triggered a focus on urban development studies. The consensus is that by 2050 the global demographic distribution will consist of 34% living in rural areas and 66% in urban areas. The world’s urban population will climb in urban areas from 3.9 billion to 6.3 billion. “Despite the global revolution in urbanization that is now occurring, many Western militaries remain cautious about embracing urban warfare as a central mission. They have good reason for such caution.”<sup>8</sup> Modern military doctrine has focused on key elements of warfare and continues to undergo a revision. In fact, manoeuvre warfare has moved to fire power, precision munitions and protection for the troops. However, one thing has remained constant in warfare doctrine, it is the reluctance to fight in cities and conduct siege operations.<sup>9</sup>

If you look at the study of future cities and growth statistics, the future of the city is the megacity. A megacity is defined as a metropolitan area with a population exceeding 10 million in

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<sup>8</sup> Michael Evans, “Future war in cities: . . . .”, 38-40.

<sup>9</sup> Alexander Vautravers, “Military operations in urban areas,” *International Review of the Red Cross* 98, Vol. 92, No. 878, (June 2010), 437.

conjunction with its slums that account for the bulk of the recent urban population growth.<sup>10</sup>

“Their very size and densely built-up character make them natural havens for a variety of hostile non-state actors, ranging from small cells of terrorists to large paramilitary forces and militias.”<sup>11</sup>

The very nature of cities or megacities represents a unique and difficult military challenge in such an operating environment. Combat in this environment would be manpower intensive and limiting non-combatant casualties difficult. In fact, according to the 2016 Mad Scientist conference on Megacities and Dense Urban Areas in 2025 and Beyond saw the challenges that the Army would face as multifaceted and numerous that would require them to conduct diverse mission sets in a changing complex terrain against hybrid threats in large areas that housed large numbers of non-combatants with embedded malicious actors who have the potential to possess overmatched technologies. Some of the tasks the future army force would be required to perform in megacities or in DUAs include:

non-combatant evacuation; humanitarian assistance/disaster relief (HA/DR) missions; raids; deny adversary objectives; counter weapons of mass destruction operations; conduct military engagements and security cooperation; provide a global stabilizing presence; provide support to civil authorities, and counter-terrorism/counterinsurgency missions.<sup>12</sup>

Throw in as well weak state structures where armed groups can exploit popular discontent and weak governance to establish a foot hold in a rapidly urbanizing world. When political violence erupts and local police and security forces cannot sustain peace, the military forces will be called in the restore order. This trend throughout the history of urban warfare has

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<sup>10</sup> Christopher O. Bowers, “Future Megacity Operations - Lessons from Sadr City.” *Military Review* 95, Iss. 3, (May/Jun 2015), 8-9.

<sup>11</sup> Richard J. Norton, “Feral cities” . . . , 9.

<sup>12</sup> Joel Lawton, Matthew Santaspirit, and Michael Crites. “Army Operations in Megacities and Dense Urban Areas: A Mad Scientist Perspective.” *Military Intelligence Professional Bulletin* 42, Iss. 3, (July 2016), 11.

been about militaries fighting for cities, not fighting in them. However, there have been historical examples of military forces fighting major battles in urban environments, such as Stalingrad, Hue and Mogadishu yet, military theorist and doctrine continue to reflect and advise military forces to avoid, bypass or isolate cities rather than wage war in them. “Thus, as military forces—which are neither trained, nor organized, nor equipped to operate in urban setting—are increasingly tasked with the restoring political stability in cities, we are witnessing catastrophic destruction and more civilian deaths than any other type of military action.”<sup>13</sup> Examples of this in recent history can be seen across Iraq, Syria and Yemen where the International Committee of the Red Cross (ICRC) have witnessed greater urban population suffering in a dense urban area where no one is spared from the violence. For example, the city of Aleppo, Syria saw almost the complete destruction and depopulation in some areas. For a city that has existed for four millennia the loss of over half its population in five years is quite significant. Historic trends have witnessed state versus non-state forces fighting in densely populated urban centers results in high levels of violence and a negative effect on infrastructure and populations. What is important to point out, that armed conflict in urban areas are not solely caused by urban population pressures or rapid population growth. These urban pressures interact with existing political and socio-economic tensions. “The instability and vulnerability of rapidly urbanizing developing-world cities makes the search for alternatives to full-scale urban warfare particularly urgent.”<sup>14</sup>

The process of urbanization has fuelled the reshaping of geopolitics, doctrine and the post-Cold war Western military strategy which has increased spending and research into technology. Three decades of concentrating on global surveillance and power projection is being

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<sup>13</sup> Foreign Policy Research Institute, “The Era of Urban Warfare is Already Here, (March 2018). <http://www.fpri.org/article/2018/03/the-era-of-urban-warfare-is-already-here/>

<sup>14</sup> Antonio Sampaio, “Before and after urban warfare...”, 73.

slowly transformed to meet the 21<sup>st</sup> century urban operating environment. Some would look to the military-industrial complex to find technophilic solutions to the purported erosion of geostrategic power because of global urbanization. The urban insurgency in Iraq was a fulcrum to transform the major techno scientific effort to develop better surveillance, communications and targeting systems that are tailored specifically to pin-point physical and human geographies of the urban environment. The Revolution in Military affairs (RMA) post Iraq invasion envisioned that research and development (R&D) efforts will address the myriad of issues of the urban environment where military forces can completely dominate using their technological advantages with minimal casualties to the troops. An example of the R&D being developed is the Combat Zones that See (CTS) project led by the US Defense Advanced Research Projects agency (DARPA), which “explores concepts, develops algorithms, and delivers systems for utilising large numbers (thousands) of algorithmic video cameras to provide the close-in sensing demanded for military operations in urban terrain.”<sup>15</sup> These R&D studies once developed are purported to help assert the dominance of military forces over urban cities with the shift to robotic air and ground weapons that are linked to persistent surveillance and target identification systems. However, these fantasies of military omniscience and omnipotence have certainly blurred the lines between wider sci-fi and cyberpunk imaginations of future military technoscience and the realities of the R&D program. “The fantasises of linking sentient, automated and omnipotent surveillance-which brings God-like levels of situational awareness to [military] forces attempting to control.....[urban megacities]”<sup>16</sup> to automated killing machines continue to dominate discussions in the RMA. The battlefield of the near future is wired up with

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<sup>15</sup> Stephen Graham, “*Technologies of Exception. Urban Warfare and the US Military Technoscience*”. Public Space Library, Nov 2005. <http://publicspace.org/en/text-library/eng/b022-technologies-of-exception-urban-warfare-and-us-military-technoscience>.

<sup>16</sup> *Ibid.*



the systems from the CTS program where unbound fantasies of omnipotent urban control meld into long-standing dreams of cyber organised and robotised warfare. These fantasies even extend further in the domain of surveillance with brain scanning of inner mental attitudes of the population towards any military force impending invasion. Targets deemed to have negative attitudes or resistant would be identified and destroyed. Certainly future research must be treated cautiously and a notion of mastery and omnipotence need to move away from technological fanaticism and more realistic R&D research. In fact, military fantasies of a clean, automated or cyber organised urban battlespace in a sprawling city like Iraq are simply wishful thinking. “It should also be remembered that, in Iraq, even rudimentary high-tech devisees have routinely failed due to technical malfunctions or extreme operations conditions.”<sup>17</sup>

### **CITIES ARE STRATEGIC CENTERS OF GRAVITY**

The current reigning logic is if by 2025 50 percent of the world’s populations are living in cities, than wars will likely occur in the urban terrain. That notion or thought is not historically grounded. In fact over the last 500 years, the number of urban warfare incidents has decreased and not increased. This decrease can be attributed to the fact that cities are strategic centers of gravity and are a valuable entity. In recent history “most incidents of modern urban warfare were mistakes, fought for all the wrong reasons: ideology, bad military doctrine, a political fixation, or an attempt to draw a superior power into city streets in order to bleed him.”<sup>18</sup> When the city is a political symbol or a religious lure such as Hue, Manila or Seoul in 1950, they turn into battlegrounds. When it comes to battlegrounds, cities are still being avoided unless they are

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<sup>17</sup> *Ibid.*

<sup>18</sup> Robert H. Scales, “A MOUT Doctrinal Concept,” Joint Urban Operations Conference, J8 Working Group (April 1999), 159. [https://www.rand.org/content/dam/rand/pubs/conf\\_proceedings/CF148/CF148.appe.pdf](https://www.rand.org/content/dam/rand/pubs/conf_proceedings/CF148/CF148.appe.pdf)

political centers or ideological lures. War is about focusing on what the strategy is and what are the ends and the means to get to there. At the operational level, it is about the means we employ to achieve the strategic objective and the tactics that will be employed to achieve the end goal. When an enemy force moves into the city to hold ground which makes them the defensive force in a technological environment, then we need to exploit the strategic mobility and even the operational mobility to place ourselves in a position that forces the enemy to come to us. Once they are enticed to come to us then we can employ the full capacity of our fire power from defensive positions. Before the enemy enters the city manoeuvre warfare plays a crucial role in which the objective is to win quickly. However, once the enemy has entered the city, time is now on our side. “The urban defender, without initiative, loses this time advantage and the attacker, external to the city, now has time on his side.”<sup>19</sup> With time no longer an issue, the city, which is already densely packed around their vulnerable infrastructure, can then be easily manipulated by an information warfare campaign. If you maintain psychological dominance over the city, the population will get its information from us rather than the enemy. Then it is a matter of taking down the city surgically and methodically by causing just enough destruction of installations that keeps the city running and allowing it to gradually collapse on itself avoiding mass destruction. In cities, the center of gravity is its population. Therefore it is important to control the population without mass casualties and by creating safe havens outside the city so civilians can avoid any low-intensity conflict from the enemy using the city. To defeat the enemy in an urban environment the use of cordon operations would control the city from outside its borders. Then with time on our side, find the vulnerabilities of the city and destroy the enemy systematically surgically with direct action. “The urban environment fundamentally is no different from any other military environment. We must protect the enemy’s people and break the will of the army

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<sup>19</sup> *Ibid.*, 161.

to resist.”<sup>20</sup> In the end if you “control the enemy’s information, find the spots in which the enemy is vulnerable, and then create sanctuaries”<sup>21</sup> you can win the city and it’s in population.

## **STABILIZATION CONCEPT**

Military doctrine for operations in cities prioritizes combat operations with a clear separation of war and peace and has yet to incorporate ideas from planning, development and administration of cities. This has had the effect of developing a doctrine in isolation and produced a rather generic concept of urban warfare. In fact, the 1979 concept of Military Operations on Urbanized Terrain (MOUT) stressed cities were too hostile and risky and should be avoided. The preferred manoeuvrist theories do not work well in the urbanized environment. In fact, there are recent historical examples of the failure of the MOUT by the US in Mogadishu and Russia in Grozny, Chechnya.

In the peace and security community the concept of conflict resolution has become an attractive concept to bypass the security dilemma of urban warfare. However, conflict prevention principles are conducted for high-level interactions at the federal levels: special political missions, the Mediation Support Unit and Special Envoys. Therefore, in the case of the urban environment, the conflict prevention concept fails to address armed groups who “tended to display little disposition for negotiations and conflict has acquired a protracted form”.<sup>22</sup> Even the presence of a large peacekeeping force and the establishment of a federal government have not always stopped the violence from local militia groups as seen in Mogadishu.

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<sup>20</sup> *Ibid.*, 163.

<sup>21</sup> *Ibid.*, 162.

<sup>22</sup> Antonio Sampaio, “Before and after urban warfare...”, 78-79.

Another form of conflict prevention is the early-warning system which scans for emerging threats and political conflicts. Like conflict resolution, it too has its dealings at the national-level assessment and tends to focus on fragile states that demonstrate preconditions for armed conflict. Conflict can erupt in large cities simply by symbolisms for instance. Take the example of the death of a taxi driver in Bangui caused a wave of ethnically and religiously inspired killings attacking government and civilian building in 2015.

Stabilization and reconstruction operations have been used by Western military forces for a range of low-intensity peace support operations in fragile areas. These operations “combines economic, governance and security measures in order to prevent or reduce violence, protect populations and infrastructure, promote institutions and governance, and achieve other political goals also highlighted in the UN’s peace-promotion infrastructure.”<sup>23</sup> Stabilization operations in theory, is a likely framework to ensure full-scale war is unlikely. The difference with stabilization operations and UN peacekeeping is that the UN requires support from other member states for resources and personnel. Another plus about stabilization operations is that although permission must be sought before a foreign intervention force enters the state from the national government, stability doctrine has the capacity to address the issues of local and urban settings. There also “seems to be more practical emphasis on the territorial aspect of the tasks needed for stability to be promoted.”<sup>24</sup> Even if force or offensive action is required during stability operations, the objectives of the concept are more about having boots on the ground improving the security situation in certain areas to pave the way for civilian initiatives then political. This phased process of stability operations gradually designed to prevent and deter further escalation

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<sup>23</sup> *Ibid.*, 86.

<sup>24</sup> *Ibid.*

of conflict. This allows the military force and police authorities to gradually gain secure areas in urban setting.

The ongoing changing character of war has certainly challenged today's mechanisms and concepts to prevent and deter war related to non-state armed groups. As urban populations grows at an alarming pace many point to urbanization as the source of instability. However, "political oriented armed conflict in cities reveals that protracted, non-state armed activity with hybrid tactics (links to insurgencies, terrorism or funding from transnational organized crime) has indeed been registered at several key large cities of the developing world."<sup>25</sup> Yet, these activities are usually taking place after either a large-scale conflict or is located near instability rather urbanization been the root cause.

## CONCLUSION

The Western militaries need to explore further the concept of urbanization and understand the three pillars of sustainable development: economic growth, social stability and environmental to create a well-rounded and comprehensive urban warfare doctrine. "Politicians and soldiers are still thinking in terms of the old paradigm [of war] and trying to use their conventionally configured forces to that end – while the enemy and the battle have changed."<sup>26</sup> They will have to shift from the 'single threat' thinking to a theory of competitive control' redefining their strategic purpose in cities. The key will be to consider governance, state authority, service provision and other public goods so they can establish control of the city and more importantly garner support from the local population in the urban setting. The rise of non-

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<sup>25</sup> *Ibid.*, 88.

<sup>26</sup> *Ibid.*, 92.

state actors and hybrid conflicts has presented new challenges to Western militaries moving them from a high-tech manoeuvre warfare concept to a ground warfare that is highly dependent on infantry tactics.<sup>27</sup> In the past six years advances in nuclear missile capabilities, improved communications technology and advances in tank technology are not what will gain victory in urban warfare. In fact, urban warfare is a low-tech problem and high-tech does not guarantee victory. Even the classic military thinkers have warned about fighting in urban areas indicating that the cost of urban warfare is attrition which leads to militaries paying the price with high casualty rates and material losses. An example of this was the US military massive presence in Baghdad that was never able to ensure security despite having complete technological military dominance, air power and well trained military troops. The complexity of the urban environment was underestimated and therefore the US troops were never able to effectively control it.<sup>28</sup>

“Cities should be viewed as centers of gravity where social, political and military interactions are heavily intertwined.”<sup>29</sup> Despite the high cost of technology, equipment and lives the increasing rate of urbanization cannot be ignored. History has shown us the brutal cost of urban warfare and the reason why the fathers of war, Clausewitz and Sun Tzu, have always said to avoid cities. In fact, Sun Tzu’s mantra from 1500 BC was the ‘worst policy is to attack cities.’ Yet, time has come for policy makers and Western military to prepare for the possibility of urban warfare. The future of urban warfare should be further defined and military doctrine should take into account OOTW (operations other than war) such as the use of cordon operations from outside the cities borders. With the growing diversity of armed threats and the complexities of a rapidly growing population in urban areas, a comprehensive approach to conflict prevention would be less costly

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<sup>27</sup> Christian A. Niksch, “The strategic Challenges of Urban Warfare,” The Faculty of the Josef Korbel School of International Studies, University of Denver (Jun 2017), 1.

<sup>28</sup> William Matthews, “Megacity Warfare: Taking Urban combat to a Whole new level,” (Feb 2015), 2. <http://www.ausa.org/article/megacity-warafer-taking-urban-combat-whole-new-level>

<sup>29</sup> Christian A. Niksch, “The strategic Challenges of Urban Warfare...”, 6.

in terms of technology, equipment and lives and would be a viable solution to urban warfare issues.

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