Current dynamics of urban military operations

Intense and protracted combat in towns and cities seems to confirm predictions that urban areas will increasingly become the primary battlefields of wars and conflicts.

By Niklas Masuhr

Both in military and in political terms, cities tend to function as focal points in violent conflicts and open warfare. Though urban combat has been an important element of warfare since the start of military history, its importance seems to be increasing in the 21st century. As such, the city of Aleppo not only marks a strategically important point on the map of the Syrian civil war, but the four-year struggle for the metropolis also exemplifies the humanitarian disaster and brutality of the conflict. In fact, it is possible to trace the political history of intense conflicts between 2014 and 2019 in terms of the combatants' ability to control the cities.

In 1996, Charles Krulak, then General in the US Marine Corps, predicted that the parameters of future conflicts would be patterned not on the model of *Desert Storm* – the operation to evict Iraqi leader Saddam Hussein's forces from Kuwait – but on the (unsuccessful) combat missions of US and Russian forces in Somalia and Chechnya. In fact, this widely cited prediction is part of a school of thought that linked two global macro-trends after the Cold War – increasing urbanization, and the rise of intra-state rather than inter-state wars.
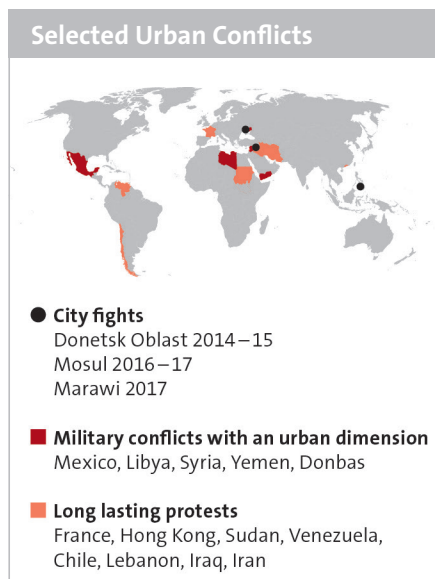
More recent demographic analyses appear to support this thesis. The UN's *World Cities Report* (2016) predicted that by 2050, two thirds of the global population would be

Special operations forces units of Iraq's "Golden Division" take part in the Iraqi counteroffensive against the "Islamic State" in March 2017 during the Battle of Mosul. *Goran Tomasevic / Reuters*

living in urban areas. A similar line is adopted by a predictive analysis by US Army's Training and Doctrine Command, which states that the ability to conduct urban operations – including in megacities – is indispensable. There are numerous examples to show that, as instruments of war, house-to-house fighting and sieges are not necessarily suited only for militarily inferior actors – the Russian military explicitly shares the assessment of US analysts regarding the growing importance of urban areas.

This analysis considers a selection of these urban hotspots that reveal short- and medium-term military trends. Specifically, it will look at examples from the war in Ukraine, the recapture of Mosul in Iraq, and the occupation of the town of Marawi in the Philippines. These battles will be contextualized with respect to long-term forecasts as well as Western and Russian military planning priorities. Finally, the Swiss Army and its current operational planning are taken into account. In conclu-

Selected Urban Conflicts

● **City fights**
Donetsk Oblast 2014 – 15
Mosul 2016 – 17
Marawi 2017

■ **Military conflicts with an urban dimension**
Mexico, Libya, Syria, Yemen, Donbas

■ **Long lasting protests**
France, Hong Kong, Sudan, Venezuela, Chile, Lebanon, Iraq, Iran

sion, predictions on the increasing importance of urban operations can be supported, at least as far as the current global power and conflict constellation are concerned. For this reason, too, it is essential for democratic armed forces and political decision-makers to strengthen capabilities for urban operations – especially for those who assert their ability to conduct military operations beyond their own borders. For Switzerland, too, there may be relevant observations and lessons among the lessons learned from high-intensity battles and urban combat, especially where military tactics and organisation are combined with terrorist motives.

Recent Examples

This analysis defines urban operations as the conscious decision of at least one party to an armed conflict to attack, defend, or besiege a town or city and its infrastructure. To provide a representative overview of recent experiences and depict a variety of strategic intentions, combat intensities, and scopes, the dynamics of three urban conflicts between 2014 and 2017 will be considered – based specifically on examples from Ukraine, Iraq, and the Philippines. Other examples might also be mentioned, including Sana'a in Yemen or the urban battlefields of Aleppo and Raqqa in the Syrian conflict. Moreover, there are fluid transitions between urban warfare and the actions of criminal paramilitary groups on the one hand and escalations and attempted suppressions of protests in (capital) cities on

the other. There are numerous cases that illustrate this fluidity, including the militarized fight against drug cartels in Mexico. In addition, in 2019 alone, there were outbreaks of protests in city centers from Chile, Venezuela, Lebanon, Iraq, and Iran to Hong Kong, and France has experienced a wave of protests since the end of 2018.

The first example concerns the two offensives carried out by the Russian army in 2014 and 2015 in eastern Ukraine in support of local separatists, both of which culminated in siege fighting. During the battles of Ilovaisk in the summer of 2014 and in Debaltseve in the winter of 2014/15, Ukrainian troops and volunteers were encircled – allowing Russian troops to rely heavily on artillery fire to increase Ukrainian casualties. The leadership in Kiev was thus strategically forced to deploy reinforcements to a situation that was difficult to sustain, rendering them unable to take offensive action against separatist positions. Politically, the hostage-taking of Ukrainian cities, their residents, and the troops on the ground forced the government to enter into negotiations. The result-

The intensely symbolic importance of towns and cities forces governments to accept significant material and human losses.

ing ceasefires in Minsk cemented military conditions that were favorable to the separatists.

In the second example, the Iraqi army, together with air support and special operations forces contributed by the Western coalition, recaptured the city of Mosul with its 200,000 residents, from fighters of the so-called "Islamic State" (IS). In addition to high military and civilian losses, the city center of Mosul was almost completely destroyed during the nine-month offensive. The aim of the IS was not to avoid being overthrown as a territorial actor, but to inflict the highest possible losses on the army in order to weaken the government in Baghdad in the long term and to exploit the battle for propaganda value.

The third example is Marawi, a city on the island of Mindanao in the southern Philippines. Here, government troops that were primarily trained and equipped for jungle warfare against irregular forces were forced by IS-affiliated militias to engage in five months of house-to-house combat that de-

stroyed large parts of the city center. While Marawi and its population of 200,000 were geographically at the center of the conflict between the Muslim south of the Philippines and the Catholic rest of the country before the jihadists took over, combat operations were limited to Marawi itself – rather than being, as in the case of Mosul, part of a wider regional military campaign. In fact, the militias here quickly withdrew to the city center, while in Mosul, the Iraqi army was already confronted by fighters on the outskirts and suburbs of the city. In Marawi, the intention was instead to focus on a propaganda effect designed to increase local, regional, and global inter-religious tensions.

Four interlinked aspects provide insights into the dynamics of urban military operations. The first is the intensely symbolic importance of towns and cities, which forces governments to accept significant material and human losses. Although the examples from Ukraine are much smaller in scale, the examples of Ilovaisk and Debaltseve illustrate how laying siege to a town can be sufficient to achieve a political effect. On the other hand, the propaganda of the regional IS cells tried to portray Mosul and Marawi as symbolic operations intended to rally a global audience.

Secondly, the role of civilian populations is particularly relevant in this context, to the extent that civilian casualties were exploited for propaganda against the governments in Baghdad and Manila – even though in the case of the Philippines, large parts of the population were able to flee and refused to join the jihadist occupiers. Nevertheless, in this case, innocent people were used as human shields. By contrast, the IS leadership in Mosul had years to prepare for the counteroffensive. For example, civilians were used, sometimes under duress, as engineers, scouts, and couriers, allowing nearly the entire IS contingent to be deployed in combat.

Thirdly, for the attacking force, the need to weigh own losses against the massive use of firepower complicated decisionmaking. In each of the cases under consideration, airstrikes and artillery barrages were used to minimize own losses and to compensate for shortcomings among their own troops with regard to training and equipment for close-quarters combat. The example of Mosul in particular illustrates this trade-off: While special operations forces were used in the east of the city (especially members of the "Golden Division"), these units had experi-

enced so much attrition by the time the western side of the city was attacked that less well-trained troops had to be used – which led to considerably more fire support with less precision being used.

Fourth, these cases are evidence that urban combat was conducted on all sides by improvised means. For example, IS in Iraq was able to set up production lines on a near-industrial scale for armored car bombs and to modify commercial drones for air support. The Philippine Army and Marine Corps, which were ill-suited for urban operations, used sheets stretched across streets to conceal themselves from snipers because they were not adequately equipped with smoke grenades.

Military Debates

The battles for Aleppo, Mosul, and Marawi in particular have triggered a debate in the general staffs of Western armed forces over the need to engage in urban combat despite the mainly political considerations that militate against deployments in urban theaters. While NATO forces primarily contributed special operations forces units as well as air and artillery assets to the offensives against IS, close-quarters combat on the ground was mainly conducted by Iraqi and Kurdish troops. However, it is by no means guaranteed that such proxies will be available in every theater of operations. Accordingly, US, Australian and European armed forces are increasingly channeling their resources into building capabilities to facilitate urban missions.

One of the core efforts involves complementing manned systems and infantry forces with robots and drones. For example, expenditures of ammunition and explosive ordnance are much higher during urban combat than in rural scenarios – autonomous trucks and delivery drones could en-

> There is a certain amount of skepticism about ever conducting urban combat in a way that does not cause massive destruction.

sure better supply levels here without endangering logistics staff. The Russian military, too, is active in this field; for instance, in its operations in Syria, it is experimenting with large-scale deployments of automated systems for demining, reconnaissance, and as weapons platforms – technologies that NATO forces also consider necessary capabilities. The US Army Mod-

ernization Strategy also explicitly references such requirements. For example, infantry fighting vehicles are to be capable of unmanned operations, and supply convoys are to consist primarily of autonomous vehicles.

In addition to technological solutions, the need to provide realistic training environments is also noted. Although such facilities are unequally distributed among NATO members and partners, there seems to be agreement on this point. While the Israeli Defense Forces and the German *Bundeswehr* (since 2019) have world-class training ranges modeled on major urban areas and the US is investing in similar assets, the British army, for example, only has a replica of an Afghan village.

One of the key priorities for the armed forces of democratic states is to develop their urban warfare skills in order to be less reliant on the use of massive firepower. Nevertheless, there is a certain amount of skepticism regarding the extent to which it is possible at all, even with dramatically improved equipment and training, to conduct urban combat in a way that does not cause massive destruction. This is precisely where democracies are faced with a dilemma, because at the political decision-making level, the risk of own military casualties must be weighed against civilian losses in the theater of operations. This is particularly problematic in urban contexts in view of the high level of connectivity: Here, there are overlapping sensor and communication networks down to the level of individuals, and every personal smartphone is potentially able to record and publish military operations globally in real time. Accordingly, in urban operations the information environment, –the political context, as well as the narratives against which military operations are conducted – must also be taken into account. Russia's approaches in Ukraine and Syria offer suitable illustrations in this context. Specifically, drones were used to hijack mobile telecommunications networks in order to send text messages to the general population. Evidently, what matters is not only the ability to, say, respond to improvised explosive devices and snipers, but also the provision of humanitarian supplies and services to the civilian population.

The Swiss context

Urban operations are also regarded as a core capability by the Swiss Armed Forces, albeit based on very different assumptions.

Further Reading

armasuisse (2020): **Urbanity. Megacity, Energy, Mobility, Information, Force Effect,** Thun: *High Lights* 001.

Arnold, Thomas D.; Fiore, Nicolas (2019): **Five Operational Lessons from the Battle for Mossul,** *Military Review,* January/February.

Knight, Charles; Theodorakis, Katja (2019): **The Marawi Crisis. Urban Conflict and Information Operations** (Canberra: Australian Strategic Policy Institute, *Special Report*).

Konaev, Margarita (2019): **The Future of urban warfare in the Age of Megacities** (Paris: Ifri, *Focus stratégique* 88).

While the core conception of urban warfare among NATO's armed forces is based on the assumption of out-of-area expeditionary missions, the Swiss army's intentions are purely defensive. For example, in 2019, the "Future of the Ground Forces" whitepaper stated explicitly that potential invaders would target Swiss cities, since their primary objective would not be the occupation of large swathes of territory. Instead, according to the report, such actors would aim to paralyze the country without exposing themselves as easy targets for military action – Built-up urban areas would thus provide both targets for attacks and opportunities for concealment. In concrete terms, the symbolic effect of cities plays a central role here. They are also the places where a large part of the country's critical infrastructure and economic activity are found. Based on this threat perception, the report found, Switzerland's military and non-military capabilities must be prepared for missions in densely populated areas. However, many possible scenarios are conceivable, ranging from temporary protection missions and covert paramilitary attacks on Switzerland's critical infrastructure to full-scale invasion. The focus is on protection during periods of heightened risk of terrorist attack and on capabilities for responding to militarily organized terrorist strikes against vulnerable targets. Defensive combat operations are also part of the debate, not least because statistics show that Switzerland's built-up areas are growing at the expense of rural areas.

A report published in January 2020 by the Federal Office for Defence Procurement *(armasuisse)* echoes the assumptions and development proposals made by Western and Russian military planners, despite the widely divergent starting positions. Here,

too, great emphasis is placed on close-knit interaction between military operations and the information environment, as well as on defensive capabilities against drones and the potential of robotic systems in providing urban mobility for ground forces. Nevertheless, the challenges that the Swiss Armed Forces face are fundamentally different ones. Indeed, many of the issues that NATO ground forces would face in urban environments are absent here. For example, the territorial localization of conscripts is

> It is unlikely that the problems of urban warfare can be solved entirely by technological means.

well suited for operations within and between population groups. Cooperation with non-military actors such as the police, civil defense services, and humanitarian organizations is considerably less complex in the home country than on out-of-area missions. The Swiss Security Network ensures that the armed forces are institutionally matched to the challenges, actors, and operational concepts involved in domestic security. In addition, the Swiss military has at its disposal essential capabilities that have been cut back more significantly in most NATO states, such as engineering vehicles and electronic warfare tools that would be essential in any urban operations. It is questionable, however, whether the focus on cities as theaters of operations is a sufficient basis for making decisions on the next generation of the Swiss Army's major platforms without specifying and engaging in political debate over the potential deployment scenarios involved. This is not an

easy task, especially given the nature of public debate, where terms such as "hybrid warfare" are expanding threat perceptions and complicating definitions.

Key Challenges

Recent combat operations in cities seem to confirm the macro-trends that have been predicted since the 1990s: Cities play an important role in violent conflicts ranging from quasi-inter-state conflicts to regional conflicts and global terrorist campaigns. At the same time, conflicts in the recent past have revealed operational and tactical details to flesh out the image depicted by highly abstract long-term trends. The fluid nature of conflicts in large cities is of particularly significance here. Thus, the four-year siege of Aleppo began with civil protests, which then escalated as a result of the brutal response of the government apparatus. The example of Mexico also illustrates how militarized criminal actions can also come under the definition of urban operations as outlined above. This is not a fundamentally new problem for NATO's armed forces, even though the battles for Raqqa and Mosul were much more intense than, say, the attempts to pacify Kandahar in Afghanistan. Nevertheless, some of the lessons relating to residents that operations in large cities have taught the ISAF mission should be relevant, particularly the crucial importance of humanitarian, intelligence, and political functions. In rural areas, too, popular support for parties to the conflict can be essential – but in urban centers, these effects are reinforced because the various groups of civilian and state actors are more densely concentrated and networked.

Due to this concentration, moreover, combat and stabilization operations automatically converge.

While these challenges may be interpreted on the political level, particularly in Europe, as warnings against overt military operations in hostile cities, military planning staffs must consider such scenarios. It is unlikely that the problems of urban warfare can be solved entirely by technological means – not least because training and adaptations of military culture will not by themselves be sufficient to prevent own losses or civilian casualties and massive destruction. Nevertheless, it seems indispensable that beyond the use of small infantry units, training must be conducted within combined-arms battlegroups and with the participation of non-military actors. Moreover, even in the absence of research budgets on a scale mirroring those of the US or China, it seems that there is useful experience to be gained from the use of new technologies in field trials. Also, the planning staffs of NATO members cannot expect to have at their disposal large pools of local partners who can be trained, equipped and supported in combat in each area of operations. Accordingly, it is important to minimize the risk of repeating negative precedents such as the debacle of US operations in Somalia in 1993, if NATO ground forces should indeed be drawn into intensive urban operations in the future.

Niklas Masuhr is researcher in the Global Security Team at the Center for Security Studies (CSS) at ETH Zurich. Among other things, he is the author of "Lessons of the War in Ukraine for Western Military Strategy".