

in town falls
anian Offensive
in Battle for Enclave

Agdam-Karabakh Victims
Buried in Azerbaijani Town
Refugees Claim Hundreds Died in Armenian Attack

Azerbaijani Town Falls
Ill-Organized Militia Bands Stand Guard

By Thomas Goltz
Special to The Washington Post

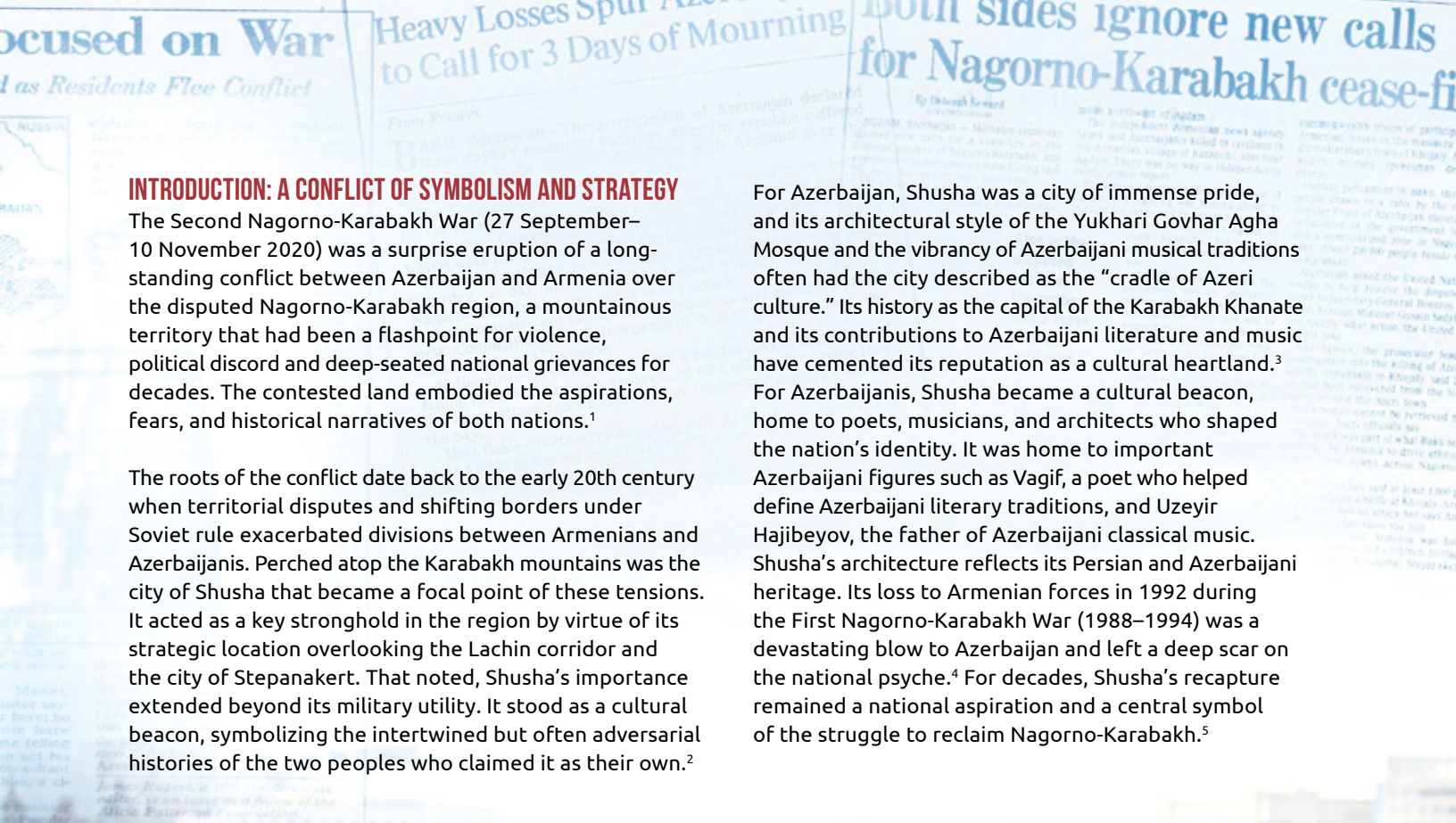
By James Rupert
Special to The Washington Post

THE 2020 Battle of Shusha:

A UNIQUE URBAN BATTLE WITH MANY LESSONS FOR MODERN WARFARE

John Spencer





INTRODUCTION: A CONFLICT OF SYMBOLISM AND STRATEGY

The Second Nagorno-Karabakh War (27 September–10 November 2020) was a surprise eruption of a long-standing conflict between Azerbaijan and Armenia over the disputed Nagorno-Karabakh region, a mountainous territory that had been a flashpoint for violence, political discord and deep-seated national grievances for decades. The contested land embodied the aspirations, fears, and historical narratives of both nations.¹

The roots of the conflict date back to the early 20th century when territorial disputes and shifting borders under Soviet rule exacerbated divisions between Armenians and Azerbaijanis. Perched atop the Karabakh mountains was the city of Shusha that became a focal point of these tensions. It acted as a key stronghold in the region by virtue of its strategic location overlooking the Lachin corridor and the city of Stepanakert. That noted, Shusha's importance extended beyond its military utility. It stood as a cultural beacon, symbolizing the intertwined but often adversarial histories of the two peoples who claimed it as their own.²

For Azerbaijan, Shusha was a city of immense pride, and its architectural style of the Yukhari Govhar Agha Mosque and the vibrancy of Azerbaijani musical traditions often had the city described as the "cradle of Azeri culture." Its history as the capital of the Karabakh Khanate and its contributions to Azerbaijani literature and music have cemented its reputation as a cultural heartland.³ For Azerbaijanis, Shusha became a cultural beacon, home to poets, musicians, and architects who shaped the nation's identity. It was home to important Azerbaijani figures such as Vagif, a poet who helped define Azerbaijani literary traditions, and Uzeyir Hajibeyov, the father of Azerbaijani classical music. Shusha's architecture reflects its Persian and Azerbaijani heritage. Its loss to Armenian forces in 1992 during the First Nagorno-Karabakh War (1988–1994) was a devastating blow to Azerbaijan and left a deep scar on the national psyche.⁴ For decades, Shusha's recapture remained a national aspiration and a central symbol of the struggle to reclaim Nagorno-Karabakh.⁵



Source: Wikimedia Vugar Amrullayev



Panoramic view of Shusha, a city in the disputed region of Nagorno-Karabakh in the South Caucasus.



Source: Wikimedia

For Armenians, Shusha held an equally profound religious and cultural significance. The city is home to the Ghazanchetsots Cathedral, a symbolic Armenian religious architectural site.⁶ Following its capture in 1992, Shusha became a cornerstone of Armenia's control over Nagorno-Karabakh, a victory celebrated by Armenians as proof of their historical and cultural ties to the land.⁷ Its strategic position enabled Armenian forces to safeguard the Lachin corridor that connected Nagorno-Karabakh to Armenia. Over time, Shusha became a cultural and political anchor for Armenian presence in the region. Losing the city in the Second Nagorno-Karabakh War was not only a military setback but also a major blow to national pride and historical narratives of victory and resilience.⁸

The stakes of the 2020 conflict were thus existential for both sides. For Azerbaijan, retaking Shusha represented a reversal of past defeats and the restoration of national identity and sovereignty.⁹ For Armenia, defending Shusha was essential to maintaining control over Nagorno-Karabakh and preserving its historical connection to the region. For both nations, Shusha is more than just a city—it is a repository of identity, memory, and resilience.¹⁰ The battle for Shusha became the decisive battle of the war as it reshaped the geopolitical landscape of the Caucasus. It also provided a strong reminder of the centrality of urban warfare in modern wars.

HISTORICAL CONTEXT: SHUSHA'S LEGACY AND THE ROAD TO BATTLE

Shusha is perched at an elevation of 1,400–1,800 metres in the Karabakh Mountains. Its history reflects the broader patterns of conflict, empire, and shifting borders that have defined the Caucasus region for centuries. Founded in 1752 by Panah Ali Khan,¹¹ it became the capital of the Karabakh Khanate and emerged as a centre of political power and cultural development. By the late 19th century, Shusha was a cosmopolitan city, home to both Armenian and Azerbaijani communities who contributed to its artistic and intellectual flourishing. This shared heritage also sowed the seeds of division, as competing narratives about the city's identity and ownership began to harden.¹²



The city's strategic importance first came to the fore during the 19th-century Russo-Persian Wars, when Shusha's location made it a key defensive outpost for the expanding Russian empire.¹³ The collapse of the Russian Empire in 1917 and the chaotic aftermath turned Shusha into a focal point of interethnic violence. As Armenians and Azerbaijanis vied for control of the South Caucasus region, Shusha became a key battleground.¹⁴

By the early 20th century, the establishment of Soviet rule in the region temporarily froze those disputes. In 1923, the Soviet Union created the Nagorno-Karabakh Autonomous Oblast (NKAO) within the Azerbaijan Soviet Socialist Republic (SSR), granting limited autonomy to the region's Armenian majority while keeping it under Azerbaijani jurisdiction.¹⁵ This arrangement sowed resentment on both sides. While Armenians viewed it as a denial of their aspirations for self-determination, Azerbaijanis saw it as a concession that undermined their territorial integrity.¹⁶

The Soviet Union's dissolution in 1991 reignited the frozen conflict over Nagorno-Karabakh. As the newly independent states of Armenia and Azerbaijan sought to assert control over the region, Shusha once again became a focal point of the struggle. Capturing Shusha was critical for Armenians to consolidate their hold over Nagorno-Karabakh and for neutralizing Azerbaijani artillery positions that threatened Stepanakert, the region's administrative centre.¹⁷

On 8 May 1992, Armenian forces launched a surprise attack on Shusha, exploiting gaps in Azerbaijani defences and scaling steep terrain to penetrate the city.¹⁸ The Azerbaijani forces were caught off guard and lacked coordinated leadership. Resultantly, they were overwhelmed and Shusha fell within hours. This victory allowed Armenian forces to dominate the Lachin corridor, which connected Nagorno-Karabakh to Armenia, and marked a turning point in the First Nagorno-Karabakh War.¹⁹

For Azerbaijan, the loss of Shusha was a national trauma.²⁰ The city's Azerbaijani population, which had been the majority before the conflict, was soon displaced and the city became a heavily militarized Armenian stronghold.²¹ The symbolic weight of this loss left an indelible mark on Azerbaijani national consciousness, turning Shusha into a rallying cry for the country's future military and political efforts.

Between 1992 and 2020, Shusha became an integral part of Armenian-controlled Nagorno-Karabakh. Its favourable location overlooking Stepanakert and the Lachin corridor made it a linchpin of Armenian defences. Over the decades, Armenian leaders sought to reinforce Shusha's identity as an Armenian city, restoring cultural landmarks like the Ghazanchetsots Cathedral while maintaining military fortifications.²²

However, this period also exposed vulnerabilities. Armenian forces overestimated the natural defences provided by Shusha's cliffs and steep access routes, assuming that they were impassable to attackers.²³ This reliance on static defences, combined with limited resources and international isolation, created conditions that would later be exploited by Azerbaijani forces during the Second Nagorno-Karabakh War.

By 2020, Azerbaijan had transformed its military capabilities. It invested heavily in advanced technology, modernized its forces, and forged strategic alliances with Turkey and Israel.²⁴ Shusha's recapture became a central objective in Azerbaijan's campaign by virtue of its strategic value and its symbolic importance. Azerbaijani President Ilham Aliyev repeatedly emphasized Shusha's role in Azerbaijani history and identity to galvanize public and military support for a future operation.

For Armenians, Shusha remained essential to their control of Nagorno-Karabakh. Losing the city would sever their access to the Lachin corridor, compromising their ability to sustain defences across the region. However, Armenian leaders failed to adapt their strategies to account for Azerbaijan's growing technological and tactical advantages.²⁵ The 2020 battle for Shusha would ultimately expose these weaknesses and reshape the region's geopolitical landscape.

THE MILITARY FORCES: A CLASH OF MODERNIZATION AND ENTRENCHMENT

The Battle of Shusha was not only a contest for control of a strategically significant city but also a stark contrast between two divergent military approaches. Azerbaijan, for its part, invested heavily in modernization and technology and brought a 21st-century approach to warfare by combining advanced systems with adaptive tactics. By contrast, Armenia relied on entrenched defences, traditional strategies, and the assumption that Shusha's natural geography would provide sufficient protection. The battle highlighted how differences in training, equipment, and leadership shaped the dynamics of urban warfare.²⁶

Azerbaijan entered the 2020 war after years of deliberate investment in military capability, supported by oil and gas revenues and its strategic partnerships.²⁷ This transformation was evident in the battle of Shusha, where Azerbaijan's emphasis on manoeuvre warfare and the integration of technology proved decisive. Azerbaijan's armed forces consisted of approximately 126,000 active-duty personnel supported by an additional 300,000 reservists.²⁸ Their special operations forces (SOF) were highly trained units specializing in mountain warfare and proved to be central to the Shusha operation. Numbering several thousand, Azerbaijan's SOFs spearheaded the daring cliffside infiltration that bypassed Armenian defensive positions and disrupted their strategy.²⁹

Azerbaijan deployed a diverse and modern arsenal during the campaign. Key elements included the following:

- **Uncrewed air vehicles (UAV):** The Turkish Bayraktar TB2 and loitering munitions like the Israeli Harop UAVs were instrumental in neutralizing Armenian artillery, supply lines, and fortified positions.³⁰
- **Armour and artillery:** Azerbaijani forces utilized T-90 and T-72 tanks alongside BMP-2 infantry fighting vehicles, supported by advanced multiple launch rocket systems like the BM-30 Smerch.³¹
- **Infantry equipment:** Azerbaijani troops were equipped with modern rifles, night vision devices, and antitank guided missiles like the Kornet-E, enabling precision targeting of Armenian vehicles and fortifications.

Azerbaijan's military had undergone extensive training in combined arms operations, interoperability, and advanced technology integration. This included joint exercises with Turkish forces that provided Azerbaijani troops with experience in modern manoeuvre warfare.³² These capabilities were evident in the battle for Shusha, where Azerbaijani forces adapted swiftly to the challenges of mountain warfare and urban combat, leveraging UAVs for reconnaissance and targeting while executing close quarters engagements with precision.

Azerbaijan's leadership played a critical role in the campaign. President Ilham Aliyev framed the war as a patriotic mission, galvanizing national support for military operations.³³ In the execution of the war, commanders like Lieutenant-General Karam Mustafayev and Major-General Hikmat Hasanov were recognized for demonstrating operational flexibility, coordinating the integration of UAVs, artillery and infantry in a cohesive strategy that were fundamental to the success of the battle of Shusha and in the war.³⁴

In contrast to Azerbaijan's modernized approach, Armenia relied on traditional defensive strategies and static fortifications. While these methods had proven effective in the First Nagorno-Karabakh War, they were less suited to counter Azerbaijan's technological and tactical advancements in 2020. Armenia's armed forces consisted of approximately 45,000 active-duty personnel, supported by 200,000 reservists.³⁵ However, logistical constraints and the speed of Azerbaijan's advances limited Armenia's ability to mobilize its full force. In Shusha, an estimated 2,000–4,000 Armenian defenders comprising regular army units, local militias and volunteer fighters were present.³⁶ Despite their familiarity with the terrain, these forces lacked the training and equipment to sustain prolonged urban defensive operations.



A Bayraktar TB2 attack uncrewed air vehicle at the Victory Parade in Baku, December 10, 2020.

Source: Wikimedia E.Mirze

Armenia's arsenal was heavily reliant on Soviet-era systems, which faced significant limitations against Azerbaijan's advanced weaponry. Key assets included the following:

- **Armour and artillery:** Armenian forces deployed T-72 tanks and BMP-1/2 infantry fighting vehicles, along with D-30 howitzers and BM-21 Grad rocket launchers. While effective in static defence, these systems were highly vulnerable to Azerbaijan's UAVs and precision-guided munitions.³⁷
- **Air defence:** Armenian systems like the 9K33 Osa and S-300 struggled to counter Azerbaijan's UAVs, leaving critical positions exposed.³⁸
- **Infantry equipment:** Armenian infantry relied on AK-74 rifles, RPG-7 antitank weapons and limited night vision equipment, further constraining their effectiveness in urban combat.

Armenian forces depended heavily on Shusha's natural defences—its steep cliffs and narrow access routes. The city was fortified with entrenched positions, choke points and sniper nests designed to delay Azerbaijani

advances. However, this static approach failed to account for Azerbaijan's ability to bypass traditional defences using unconventional routes and advanced technologies.

Armenian leadership faced significant challenges during the battle for Shusha. For instance, key commanders were absent or withdrew during critical phases of the fight and some troops reportedly refused to fight or deploy, thus undermining morale and cohesion.³⁹ Communication breakdowns and logistical issues further weakened Armenian defences and left many units isolated. Not disregarding the determination of local commanders and militias, the lack of centralized leadership proved costly.⁴⁰

The opposing forces in Shusha displayed a sharp contrast in terms of military philosophy and capability. Azerbaijan's emphasis on modernization, technology, and leadership cohesion enabled it to execute a sophisticated campaign that overcame Shusha's formidable defences. Armenia, while fighting valiantly, was hindered by outdated strategies, logistical constraints and leadership failures.

BATTLE PROGRESSION: THE PATH TO SHUSHA

The campaign to capture Shusha was a detailed, planned and executed operation that combined technological superiority and tactical innovation of Azerbaijani forces. The journey from Hadrut to Shusha, approximately 30 kilometres of rugged terrain and fortified Armenian defences, presented initial and immense challenges. At the start of the war, the city's population was reported to be approximately 5,000 people, almost all ethnic Armenians.⁴¹ The majority of civilian residents evacuated the city in order to avoid the impending battle, leaving only the military defenders.⁴²

Shusha's natural geography has long made it a formidable defensive position. Situated atop steep cliffs and accessible only by narrow, winding roads, the city offers unparalleled defensive advantages to its occupants. The surrounding Karabakh mountains are densely forested, with treacherous ravines and rocky outcrops that complicate the movement of both infantry and armoured units. For Armenian forces, these features reinforced their confidence in Shusha's impregnability. However, they also created blind spots that Azerbaijani forces exploited.

Phase One: Securing the Southern Flank

The Azerbaijani campaign began with the capture of Hadrut in mid-October 2020, a pivotal moment in the broader war. Hadrut served as a staging ground for subsequent operations into the heart of Nagorno-Karabakh. Azerbaijani forces employed UAVs with devastating effect during this phase, using the Bayraktar TB2 and Harop UAVs to destroy Armenian artillery, disrupt supply lines and neutralize defensive positions.⁴³

Following the capture of Hadrut, Azerbaijani troops advanced through the dense forests and narrow mountain passes, avoiding the heavily fortified highways that connected Armenian positions.⁴⁴ This approach minimized exposure to Armenian artillery but came at the cost of grueling marches through challenging terrain. Special operations forces spearheaded the advance, conducting reconnaissance and clearing obstacles ahead of the main force.⁴⁵

The journey from Hadrut to Shusha was not without cost. Though outmatched technologically, Armenian forces still inflicted significant casualties through ambushes and defensive actions. Narrow mountain passes became killing zones where Armenian defenders targeted advancing Azerbaijani columns with small arms fire and rocket-propelled grenades.⁴⁶ Azerbaijani commanders responded by deploying UAVs for overhead surveillance, mitigating some of the risks posed by Armenian ambushes.⁴⁷

Phase Two: Dashalti and the Approaches to Shusha

One of the most critical engagements in the campaign occurred in Dashalti, a village located just south of Shusha at the base of its cliffs. Dashalti was a defensive outpost for Armenian forces that was designed to block Azerbaijani advances into the city. With its narrow streets and elevated position, the village's terrain provided Armenian defenders with a strong tactical advantage.⁴⁸

Azerbaijani forces launched a coordinated assault on Dashalti, combining UAV strikes with infantry attacks. The UAVs targeted Armenian reinforcements attempting to reach the village while Azerbaijani troops engaged in house-to-house combat to dislodge entrenched defenders. Despite fierce resistance, Dashalti fell after days of intense fighting and cleared the way for Azerbaijani forces to focus on Shusha itself.⁴⁹

The battle for Dashalti was among the costliest engagements leading up to Shusha, with heavy losses on both sides. Armenian forces suffered from devastating UAV strikes, while Azerbaijani troops encountered stiff resistance during close quarters combat.⁵⁰ Notably, Dashalti's fall was a turning point, as it severed Armenian access to key supply routes and isolated Shusha's defenders.

Phase Three: The Cliffside Infiltration

The defining moment of the campaign was the infiltration of Azerbaijani special forces into the city by scaling Shusha's southeastern cliffs. Rising over 300 metres, these cliffs were considered impassable by Armenian defenders, who instead concentrated their fortifications along the main road. Azerbaijani commanders recognized this oversight and devised a bold plan to scale the cliffs under the cover of darkness.⁵¹

The operation to scale the cliffs was an extraordinary feat of physical endurance and tactical risk. According to Azerbaijan reports, approximately 400 Azerbaijani special forces soldiers, divided into four groups of 100, undertook this daring ascent under the cover of darkness.⁵² Carrying minimal equipment to maintain speed and stealth while still having enough ammunition and anti-armour weapons to sustain themselves for the initial break-in, the teams used ropes and climbing gear to navigate the sheer cliffs surrounding the city.⁵³ Upon reaching the plateau, the special forces surprised and then defeated Armenian defensive positions, disrupting entrenched defensive lines and creating critical breaches.

Phase Four: The Urban Battle for Shusha

Fought from 6–9 November 2020, the urban battle for Shusha represented the climax of the Azerbaijani campaign to retake the city. It was a dramatic shift from manoeuvre warfare in rugged terrain to grueling close quarters combat within a densely fortified urban

environment. Shusha's narrow streets, fortified structures and natural defenses provided Armenian forces with significant tactical advantages, but Azerbaijani forces overcame these challenges through adaptability, tactical ingenuity and the use of advanced technology.

Following their daring cliffside infiltration, Azerbaijani SOFs established positions on Shusha's southeastern outskirts. This manoeuvre caught Armenian defenders off guard as their fortifications and troops were concentrated along the main southern approach to the city.

The first hours of the battle were marked by intense skirmishes as Azerbaijani troops engaged Armenian outposts and sniper positions. The rugged terrain and limited visibility provided cover for Azerbaijani forces but also slowed their progress. Armenian defenders used small arms, machine guns, and mortars in an attempt to soften the Azerbaijani lodgment, and then they launched counterattacks to dislodge the infiltrators. Azerbaijani units responded by using UAVs for real-time reconnaissance and deployed precision-guided munitions to neutralize fortified positions.⁵⁴

Azerbaijani forces then pushed deeper into Shusha and targeted key defensive positions that anchored Armenian resistance. One of the most fiercely contested sites was the Shusha prison complex, located near the southeastern cliffs. Armenian forces had fortified the prison, using its thick walls and elevated vantage points to create a stronghold.⁵⁵ The assault on the prison was another defining moment of the urban battle. Azerbaijani special forces launched a coordinated attack, employing grenades, mortars and antitank guided missiles to breach the structure's defences.⁵⁶ Close quarter combat then ensued as Azerbaijani troops cleared the prison room by room, encountering stiff resistance from Armenian defenders. The capture of the prison enabled Azerbaijani forces to secure the southeastern sector of the city and establish a staging ground for logistical resupply and further advances into the urban core. This success disrupted Armenian command and control within Shusha, further demoralizing their forces.

As Azerbaijani troops moved beyond the prison, the battle devolved into house-to-house combat. The narrow streets and densely packed buildings forced both sides to rely on infantry tactics and portable weaponry. Azerbaijani forces employed "hugging the enemy" techniques, engaging at close range to minimize the effectiveness of Armenian artillery and mortar fire.

Armenian defenders attempted to delay the Azerbaijani advance by relying on sniper nests and barricades. Improvised explosive devices and booby traps added to the challenges faced by Azerbaijani troops, who countered

these threats with methodical clearing operations.⁵⁷ Portable antitank weapons such as RPG-7s proved critical in neutralizing Armenian vehicles and fortified positions.

On 7 November, dense fog blanketed Shusha, temporarily grounding Azerbaijani UAVs and reducing visibility for both sides. This pause in aerial operations provided Armenian forces with a brief opportunity to regroup and launch counterattacks.⁵⁸ The Armenian reinforcements included T-72 tanks and BMP-2 infantry fighting vehicles, and these counterattacks were aimed at retaking key positions in the city's southeastern quadrant.⁵⁹ The confined urban environment amplified the effectiveness of these armoured assaults and forced Azerbaijani troops to rely on portable antitank weapons and ambush tactics. Despite consolidated effort and favourable weather, the counterattacks faltered because of poor coordination and sustained Azerbaijani resistance.

By 8 November, Azerbaijani forces had gained control of key infrastructure, including the Shusha Executive Power building.⁶⁰ This marked the beginning of the final phase of the battle, as Armenian defences began to collapse under sustained pressure. The fight for the city centre involved intense clearing operations, with Azerbaijani troops systematically neutralizing remaining Armenian strongholds. They employed grenades, breaching charges and close quarter weapons to dislodge defenders from fortified positions. Armenian resistance was determined but became increasingly fragmented and many units retreated or surrendered. As Azerbaijani forces consolidated their control over Shusha and continued resupply efforts, remaining Armenian defenders began a disorganized withdrawal toward the Lachin corridor. However, Azerbaijani advances along the surrounding routes made escape increasingly difficult, resulting in significant Armenian casualties and prisoner captures.⁶¹

On 9 November, Azerbaijani President Ilham Aliyev announced the complete liberation of Shusha, asserting total victory in the city.⁶² While Armenian officials initially denied this claim, the following day Armenian Prime Minister Nikol Pashinyan signed a peace agreement under unfavourable terms.⁶³ The deal included the surrender of all territories in Nagorno-Karabakh captured by Azerbaijani forces during the conflict, including Shusha.⁶⁴

The urban battle for Shusha was a small part of the broader dynamics of the 2020 Nagorno-Karabakh War, but it was decisive. It showcased the importance of urban terrain, the challenges of urban warfare, the importance of adaptability and the decisive role of technology in modern conflicts. Azerbaijani forces demonstrated a combination of technological innovation, tactical creativity and leadership to overcome Shusha's formidable defenses. For Armenia, the loss of Shusha was a devastating blow, symbolizing the

collapse of their campaign and the vulnerabilities of their static defensive strategies. The fall of Shusha compelled Armenia to agree to a ceasefire, which effectively ended the war. For Azerbaijan, it was not only a military victory but also a symbolic restoration of national pride, reshaping the geopolitical landscape of the South Caucasus.⁶⁵

LESSONS IDENTIFIED FROM THE BATTLE OF SHUSHA

The battle of Shusha offers profound insights for military planners, strategists and leaders grappling with the complexities of urban warfare in the 21st century. The confluence of advanced technology, challenging terrain and intense urban combat during the battle underscored the need for adaptability, innovation and a deep understanding of the operational environment. The lessons that can be extracted from the Battle of Shusha are not confined to the South Caucasus and have broader implications for urban warfare worldwide.

1. Urban Centres as Strategic Objectives

Urban centres such as Shusha are not merely tactical objectives but hold immense strategic, cultural and symbolic value. For Azerbaijan, Shusha represented the reclamation of lost sovereignty and a cultural renaissance. Its strategic location, which overlooked Stepanakert and the Lachin corridor, made it vital for controlling Nagorno-Karabakh. For Armenia, defending Shusha was existential, given its role as a cornerstone of their presence in the region. This dynamic reinforces the importance of prioritizing urban centres in military planning. Simply put, controlling such cities can decisively shift the balance of a conflict.

2. Leveraging Technological Superiority

The extensive use of UAVs by Azerbaijani forces during the campaign proved to be transformative. UAVs such as the Bayraktar TB2 provided real-time intelligence, targeted precision strikes, and disrupted Armenian logistics. The Harop loitering munitions neutralized entrenched positions with efficiency and rendered traditional air defences less effective. This technological edge allowed Azerbaijan to systematically degrade Armenian defences before engaging in ground combat.

However, the battle also exposed the limitations of technology. The dense fog on 7 November grounded Azerbaijan's UAVs, forcing troops to adapt without aerial support. This underscores the need for forces to balance reliance on technology with proficiency in conventional tactics. Militaries must invest in UAVs as well as counter-UAV capabilities while ensuring redundancy in operations to mitigate technological vulnerabilities.

3. Terrain Exploitation and Tactical Innovation

The Azerbaijani cliffside infiltration exemplifies the power of innovative thinking in overcoming seemingly insurmountable obstacles. Shusha's natural defences,

including its 300-metre-high cliffs, were regarded as impregnable, which led the Armenian defenders to focus on the southern approaches to the city instead. Exploiting this oversight, Azerbaijani special forces scaled the cliffs under cover of darkness to launch surprise attacks on Armenian positions.

This manoeuvre demonstrates the importance of thorough terrain analysis and creative problem-solving in military operations. It also highlights the vulnerabilities of static defenses even in urban areas. Relying solely on natural or constructed barriers without accounting for adversarial adaptability can lead to catastrophic outcomes. Commanders must constantly reassess assumptions about terrain and identify opportunities for surprise.

4. The Challenges of Urban Combat

Urban warfare remains one of the most complex and resource-intensive forms of conflict. The battle for Shusha underscored these challenges, with its house-to-house fighting, use of improvised explosive devices and dense infrastructure, which considerably limited mobility. Azerbaijan's forces had to adapt quickly, which required employing small-unit tactics and leveraging close-range engagements to neutralize Armenian defenders.

For Armenian forces, urban combat posed a different set of challenges. Their reliance on static defences, lack of contingency planning and limited mobility made it difficult to respond to Azerbaijani advances. As seen in Shusha, defending forces in urban areas must balance fortifications with the ability to manoeuvre and adapt to evolving threats.

Urban combat also places immense psychological strain on soldiers. The claustrophobic environment, the constant threat of ambush, the exhaustion emanating from close combat fights, and the proximity to civilian structures demand extraordinary discipline and resilience. These factors must be integrated into training and operational planning.

5. Leadership as a Force Multiplier

Effective leadership was a decisive factor in the battle of Shusha. Azerbaijani commanders demonstrated operational flexibility, integrating UAVs with ground operations and adjusting tactics as the battle evolved. The ability of commanders, staff and the forces to constantly adapt was critical in maintaining momentum during the urban phase of the campaign.

In contrast, Armenian leadership faced significant challenges. Reports of absent commanders, communication breakdowns and logistical failures undermined Armenian defenses.⁶⁶ The demoralized troops and the lack of unified decision-making accelerated the collapse of resistance in Shusha.

Leadership remains one of the most critical determinants of success in urban warfare. Commanders must foster adaptability, maintain morale and ensure effective communication under the most challenging conditions.

6. The Role of Logistics in Urban Operations

The ability to sustain operations in urban environments depends heavily on robust logistical support. Despite the challenges of mountainous terrain and contested supply lines, Azerbaijani forces effectively delivered reinforcements, ammunition and medical care to frontline units.⁶⁷ This logistical resilience was instrumental in maintaining operational tempo and overcoming Armenian defences.

Conversely, Armenian forces in Shusha faced severe logistical constraints. Azerbaijani advances disrupted supply lines, leaving defenders isolated and under-equipped. This lack of logistical support contributed to the collapse of Armenian resistance.

The lessons of Shusha align with those of historical battles like Stalingrad (1942–1943) and Mosul (2016–2017), where logistics played a pivotal role in sustaining combat operations. Militaries must prioritize logistical planning and redundancy to ensure resilience in prolonged urban engagements.

7. Symbolism and the Psychological Dimension

The symbolic and psychological aspects of Shusha were as important strategically as the tactical and operational dimensions. For Azerbaijan, retaking Shusha was framed as a national redemption, restoring sovereignty over a cultural heartland. This narrative galvanized Azerbaijani troops and sustained public support for the campaign.⁶⁸ For Armenia, the loss of Shusha was devastating both militarily and emotionally. It shattered the perception of Nagorno-Karabakh as an impregnable stronghold and undermined morale among Armenian forces and civilians.

The psychological dimension of urban warfare cannot be overstated. Maintaining morale, managing expectations and shaping narratives are critical components of success. Commanders must account for these factors when planning and executing operations.

CONCLUSION: INSIGHTS FOR FUTURE CONFLICTS

The battle of Shusha offers a compelling case study to extract lessons that resonate far beyond the South Caucasus. It underscores the evolving nature of urban warfare and the increasing demand it places on the forces. The complex and multifaceted nature of urban warfare is heavily shaped by the confluence of technology, terrain, training, leadership and adaptability. Urban centres like Shusha, with their strategic, cultural, and symbolic significance, are no longer just tactical objectives but

critical centres that can determine the trajectory and outcome of conflicts. As noted in the article, the innovative use of UAVs and creative exploitation of terrain by Azerbaijani forces, combined with effective leadership and logistical resilience, were crucial in overcoming formidable obstacles. At the same time, the battle revealed the drawbacks of depending too heavily on technology and the challenges of static defences. Furthermore, the collapse of Armenian resistance was not only a result of subpar military tactics and an inability to modernize or adapt, but also the erosion of morale and leadership.

As urban warfare continues to shape future conflicts, understanding and integrating these lessons will be crucial for success in the future land operating environment. For military planners and strategists worldwide, Shusha stands as a testament to the complexity of modern warfare and the critical need for forces to be flexible, resilient, and capable of navigating the complex dimensions of urban combat. 🇦🇿

ABOUT THE AUTHOR

John Spencer is chair of urban warfare studies at the Modern War Institute and codirector of its Urban Warfare Project, and he is the host of the Urban Warfare Project Podcast. He served twenty-five years as an infantry soldier, which included two combat tours in Iraq. He is the author of the books *Connected Soldiers: Life, Leadership, and Social Connections in Modern War*, *The Mini-Manual for the Urban Defender*, and he is coauthor of *Understanding Urban Warfare*.

ENDNOTES

1. S. E. Cornell, *Small Nations and Great Powers: A Study of Ethnopolitical Conflict in the Caucasus* (London: Routledge Publishing, 2001), 76–82.
2. C. J. Walker, *Armenia: The Survival of a Nation* (London: Routledge Publishing, 1991), 185–190.
3. Aida Huseynova, *Music of Azerbaijan: From Mugham to Opera* (Bloomington: Indiana University Press, 2016), 34–29.
4. T. De Waal, *Black Garden: Armenia and Azerbaijan Through Peace and War*, 2nd ed. (New York: New York University Press, 2013), 65–70.
5. John Spencer, “The Battle of Shusha City and the Missed Lessons of the 2020 Nagorno-Karabakh War,” *Modern War Institute*, 14 July 2021, <https://mwi.westpoint.edu/the-battle-of-shusha-city-and-the-missed-lessons-of-the-2020-nagorno-karabakh-war>.
6. “Holy All Savior Ghazanchetsots Church in Shushi,” *Monument Watch*, accessed 9 December 2024, <https://monumentwatch.org/en/monument/holy-all-savior-ghazanchetsots-church-in-shushi/>.

7. C. Zurcher, *The Post-Soviet Wars: Rebellion, Ethnic Conflict, and Nationhood in the Caucasus* (New York: New York University Press, 2007), 112–118.
8. S. T. Hunter, *The Transcaucasus in Transition: Nation-Building and Conflict* (Washington, D.C.: CSIS Press, 2017), 123–130.
9. De Waal, *Black Garden*, 245–250.
10. “History of Shusha,” *Shusha City official website*, accessed 9 December 2024, <https://shusha.gov.az/en/susa-trxi>.
11. Ibid.
12. Walker, *Armenia*, 185–190.
13. A. L. Altstadt, *The Azerbaijani Turks: Power and Identity Under Russian Rule* (Stanford: Hoover Institution Press, 2016), 210–215.
14. Zurcher, *The Post-Soviet Wars*, 112–118.
15. Cornell, *Small Nations and Great Powers*, 128–132.
16. Ibid., 145–150.
17. De Waal, *Black Garden*, 245–250.
18. Ibid., 185–190.
19. Spencer, “The Battle of Shusha City and the Missed Lessons of the 2020 Nagorno-Karabakh War.”
20. Cornell, *Small Nations and Great Powers*, 198–202.
21. “Karabakh’s Latest Cycle of Displacement,” *Eurasianet*, accessed 9 December 2024, <https://eurasianet.org/karabakhs-latest-cycle-of-displacement>.
22. “Shusha: Azerbaijan’s Cultural Capital and the Heart of the Nagorno-Karabakh Conflict,” *Time*, accessed 9 December 2024, <https://time.com/6208925/shusha-nagorno-karabakh-azerbaijan-capital/>.
23. Spencer, “The Battle of Shusha City and the Missed Lessons of the 2020 Nagorno-Karabakh War.”
24. “Israeli Weapons Quietly Helped Azerbaijan Retake Nagorno-Karabakh: Sources, Data,” *Times of Israel*, 8 November 2020, <https://www.timesofisrael.com/israeli-weapons-quietly-helped-azerbaijan-retake-nagorno-karabakh-sources-data/>.
25. Ryan Brennan, “A Failure to Innovate: The Second Nagorno-Karabakh War,” *Parameters* 52, No. 1 (2022): 67–80, <https://press.armywarcollege.edu/parameters/vol52/iss1/10/>.
26. Spencer, “The Battle of Shusha City and the Missed Lessons of the 2020 Nagorno-Karabakh War.”
27. “Azerbaijan’s Unifying Role in Turkish-Israeli Relations,” *Endowment for Middle East Truth (EMET)*, 12 October 2020, <https://emetonline.org/azerbaijans-unifying-role-in-turkish-israeli-relations/>.
28. Cornell, *Small Nations and Great Powers*, 145–150.
29. Altstadt, *The Azerbaijani Turks*, 210–215.
30. Royal Air Force, “The Role of Airpower in Contemporary Conflict,” *Centre for Air and Space Power Studies* 25, No. 2/3 (2023), <https://www.raf.mod.uk/what-we-do/centre-for-air-and-space-power-studies/aspr/aspr-vol25-iss2-3-pdf/>.
31. Edward J. Erickson, “The 44-Day War: Observations and Lessons from the Azerbaijani Victory over Armenia in the Second Nagorno-Karabakh War,” *Military Review Online Exclusive*, U.S. Army, 2021, <https://www.armyupress.army.mil/Portals/7/military-review/img/Online-Exclusive/2021/erickson/Erickson-the-44-day-war.pdf>.
32. Jamestown Foundation, “Azerbaijan, Turkey Hold Large-Scale Military Drills Amidst Escalation of Tensions with Armenia,” *Eurasia Daily Monitor*, 29 July 2020, <https://jamestown.org/program/azerbaijan-turkey-hold-large-scale-military-drills-amidst-escalation-of-tensions-with-armenia/>.
33. Office of the President of Azerbaijan, “President Ilham Aliyev: The Patriotic War for the Liberation of Azerbaijani Lands,” *official website of the President of Azerbaijan*, 8 November 2020, <https://president.az/en/articles/view/44435>.
34. “President Ilham Aliyev Congratulates 1st Army Corps Commander Hikmet Hasanov on Liberation of Madagiz from Occupation,” *APA News*, 3 October 2020, <https://apa.az/en/domestic-news/President-Ilham-Aliyev-congratulates-1st-Army-Corps-Commander-Hikmet-Hasanov-on-liberation-of-Madagiz-from-occupation-331987>; “Azerbaijani President Awards Defence Minister, Two More Senior Military Officers,” *Defence.az*, 25 June 2018, <https://archive.ph/20210104143151/http://defence.az/en/news/128326/azerbaijani-president-awards-defence-minister,-two-more-senior-military-officers>.
35. U.S. Army, *Nagorno-Karabakh 2020 Conflict Catalog*, Army Futures Command, August 2021, <https://api.army.mil/e2/c/downloads/2023/01/31/693ac148/21-655-nagorno-karabakh-2020-conflict-catalog-aug-21-public.pdf>.
36. Spencer, “The Battle of Shusha City and the Missed Lessons of the 2020 Nagorno-Karabakh War.”
37. Missile Defense Project (website), “The Air and Missile War in Nagorno-Karabakh: Lessons for the Future of Strike and

- Defense," *Center for Strategic and International Studies (CSIS)*, 9 December 2020, <https://www.csis.org/analysis/air-and-missile-war-nagorno-karabakh-lessons-future-strike-and-defense>.
38. "Israeli-Made 'Suicide Drones' Help Azerbaijan Destroy Armenian Targets in Karabakh," *Middle East Eye*, 29 October 2020, <https://www.middleeasteye.net/news/azerbaijan-armenia-russia-israel-suicide-drones-destroy>.
 39. "Why Was the War Lost in Karabakh? Samvel Babayan's Revelations from the 44-Day War," *Hyetert*, 14 December 2020, <https://hyetert.org/2020/12/14/why-was-the-war-lost-in-karabakh-samvel-babayans-revelations-from-the-44-day-war/>; Cornell, *Small Nations and Great Powers*, 76–82.
 40. De Waal, *Black Garden*, 65–70.
 41. Timothy Lister, "War Tips in Favour of Azerbaijan as Army Captures Key Town in Nagorno-Karabakh," *The Telegraph* 8 November 2020, <https://www.telegraph.co.uk/news/2020/11/08/war-tips-favour-azerbaijan-army-captures-key-town-nagorno-karabakh/>.
 42. "The Battle for Shusha," *Meduza*, 7 November 2020, <https://meduza.io/en/feature/2020/11/07/the-battle-for-shusha>.
 43. "Four Years Pass Since Liberation of Hadrut Town," *Report.az*, 9 October 2024, <https://report.az/en/karabakh/four-years-pass-since-liberation-of-hadrut-town/>.
 44. "A Unique Military Operation to Liberate Dashalti and Shusha in November 2020," *Azerbaijan Today*, 20 November 2021, <https://azerbaijantoday.az/2021/11/20/a-unique-military-operation-to-liberate-dashalti-shusha-in-november-2020/>.
 45. Spencer, "The Battle of Shusha City and the Missed Lessons of the 2020 Nagorno-Karabakh War."
 46. U.S. Army, *Nagorno-Karabakh 2020 Conflict Catalog*.
 47. Missile Defense Project, "The Air and Missile War in Nagorno-Karabakh."
 48. "31 Years Pass Since Operation in Dashalti Village," *Report.az*, 26 January 2023, <https://report.az/en/karabakh/31-years-pass-since-operation-in-dashalti-village/>.
 49. Spencer, "The Battle of Shusha City and the Missed Lessons of the 2020 Nagorno-Karabakh War."
 50. Meduza, "The Battle for Shusha."
 51. De Waal, *Black Garden*, 245–250.
 52. "A Unique Military Operation to Liberate Dashalti and Shusha in November 2020," *Azerbaijan Today*, 20 November 2021, <https://azerbaijantoday.az/2021/11/20/a-unique-military-operation-to-liberate-dashalti-shusha-in-november-2020/>.
 53. "Victory in the Patriotic War: The Liberation of Shusha," *Azerbaijan.az*, November 2020, <https://azerbaijan.az/en/related-information/304>.
 54. "Why Drones Turned the Tide for Azerbaijan: An Analysis," *Vivekananda International Foundation*, 4 December 2020, <https://www.vifindia.org/article/2020/december/04/why-drones-turned-the-tide-for-azerbaijan-an-analysis>.
 55. Spencer, "The Battle of Shusha City and the Missed Lessons of the 2020 Nagorno-Karabakh War."
 56. Ibid.
 57. "Booby Traps Are Being Neutralized in the Karabakh Region of Azerbaijan," *Ministry of Defense of Azerbaijan*, accessed 9 December 2024, <https://mod.gov.az/en/news/booby-traps-are-being-neutralized-in-the-karabakh-region-of-azerbaijan-video-49587.html>.
 58. Jeffrey Borsuk, "The Role of UAVs in the Battle for Shusha," *Military Strategy and Tactics Journal* 35, No. 4 (2021): 12–28, <https://www.jstor.org/stable/48638213?seq=2>.
 59. Spencer, "The Battle of Shusha City and the Missed Lessons of the 2020 Nagorno-Karabakh War."
 60. Ibid.
 61. Azerbaijan Today, "A Unique Military Operation to Liberate Dashalti and Shusha in November 2020."
 62. Ibid.
 63. Meduza, "The Battle for Shusha."
 64. "Azerbaijan Leads the Turkic World Into a New Era of Synergy and Development – Analysis," *Eurasia Review*, 11 July 2024, <https://www.eurasiareview.com/11072024-azerbaijan-leads-the-turkic-world-into-a-new-era-of-synergy-and-development-analysis/>.
 65. Ibid.
 66. Hyetert, "Why Was the War Lost in Karabakh?"
 67. Brennan, "A Failure to Innovate."
 68. "Shusha's Significance for Azerbaijan: President Aliyev's Call for Regional Stability," *Caliber.az*, 8 November 2022, <https://caliber.az/en/post/shusha-s-significance-for-azerbaijan-president-aliyev-s-call-for-regional-stability/>.