MASTER OF MILITARY STUDIES

THE INFLUENCE OF INTERNATIONAL LAW UPON MILITARY OPERATION ON URBANIZED TERRAIN (MOUT) DURING ROMANIAN REVOLUTION, DECEMBER 1989

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Abstract
The engagement of cities in battle has created political and military debates for a long time. In their plans, politicians included the use of cities as a political goal and an objective of grand strategy. Military leaders agreed upon the use of cities as strong points in defense, but disagreed about the necessity of conquering cities during campaigns. For military leaders, to fight in a city meant a protracted war, and the loss of lives and property. The view concerning cities and war has evolved over time. For Sun Tzu, to attack and besiege a city was a protracted operation. He calculated that to conquer a city would take almost one year: three months for equipments preparation; three months for building special siege equipment; and several months for the siege itself. Mao Tse-tung used Sun Tzus lesson during the Chinese Civil War, when he deemed that it was unnecessary to attack the enemy in cities to win the war. His thought drastically reoriented the policy of the Chinese Communist Party, questioning the doctrine of Kremlin infallibility, which asserted that the revolution will win only in cities.

Subject Terms

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Illustrations

Tables

Table of Contents

Preface

The engagement of cities in battle has created political and military debates for a long time. In their plans, politicians included the use of cities as a political goal and an objective of grand strategy. Military leaders agreed upon the use of cities as strong points in defense, but disagreed about the necessity of conquering cities during campaigns. For military leaders, to fight in a city meant a protracted war, and the loss of lives and property.

The view concerning cities and war has evolved over time. For Sun Tzu, to attack and besiege a city was a protracted operation. He calculated that to conquer a city would take almost one year: three months for equipment's preparation; three months for building special siege equipment; and several months for the siege itself. Mao Tse-tung used Sun Tzu's lesson during the Chinese Civil War, when he deemed that it was unnecessary to attack the enemy in cities to win the war. His thought drastically reoriented the policy of the Chinese Communist Party, questioning the doctrine of Kremlin infallibility, which asserted that the revolution will win only in cities.

Clausewitz saw the capital of a country as an enemy's center of gravity, whose conquest can lead to victory. Because of the moral, political, and economic potential of cities, Clausewitz's theory was enlarged by the 20th century air power theorists (see Figure 1), from the capital to all important cities of a country-target.
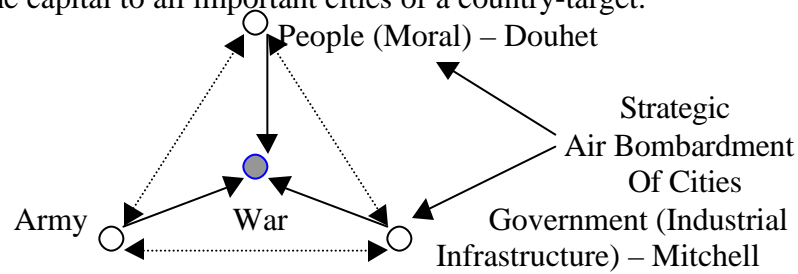
Figure 1. Air Power Theories of Using Cities in Battle.

After the appearance of the atomic bomb, both American strategies of using nuclear weapons in war ("Massive retaliation" and "Flexible response") included the cities as principal targets. The Soviet nuclear war theorists defined war's beginning as a massive nuclear bombardment of the principal cities. But threat of destruction caused by the nuclear power was so great that it deterred the use of nuclear war as a political instrument. The nuclear war threat really led to a renewed emphasis on conventional weapons and today the war theorists and strategic headquarters are replacing the use of nuclear weapons in the enemy's largest cities with smart/high precision conventional weapons. But the doctrine of bombing the cities remains the same.

The evolution of international law after 1949, which protects non-combatants and their properties in cities, moved in an opposite and contradictory direction from the theories concerning the use of cities in battle. Consequently, there is a need consider the influence or restraint of international law upon MOUT. Further, the Romanian Revolution can be analyzed as a case study in order to demonstrate this influence.

Chapter 1

Urbanization – a 20th Century Phenomenon

*"Cities …an indirect protection of the country,
by means of their strategic value as knots that hold
the web of strategy together."*

Clausewitz[1]

The urbanization of the developing world is increasing as world population grows dramatically. The total population rose three-fold to six billion between 1945 and 1996. In 2025 the world population will exceed eight billion. An increase of two billion people could create 280 cities the size of New York city today. Few new population centers are anticipated. Speculations are that most of the growth will be absorbed by unofficial "squatter" additions to already existing cities in the developing world. This environment is the most ideal for future internal and external conflicts.

What is Urbanization?

Urbanization in the 20th century is the process of expansion of cities, due to industrialization as part of globalization and mass migration of rural people to towns. This phenomenon comprises four basic forms: demographic, spatial, economic, and social.[2]

    a. Demography represents the growth in the sheer numbers of population, which is a serious alarm signal (see Figure 2). This growth is related to the natural resources existing in each country, and the main concern is whether population growth will outstrip the resource bases. The existence of natural resources is a question of

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[1] Clausewitz, Carl von *" On War"*, edited and translated by Michael Howard and Peter Paret, Princetown University Press, NJ, 1984, p.394.

[2] *"Encyclopedia of the United Nations and International Agreements",* Taylor and Francis, Philadelphia, 1985, p.859.

survivability. In addition to the demographic explosion, there is chaotic, uncontrolled

growth of urban areas in the major populated regions of the world, especially in the third

world (see table 1).

> In 1830, the global population reached one billion for the first time; it
> required 100 years to double. It took only 45 more years (1975) for the
> population to double again to four billion.   In the next 21 years
> the population increased almost two billion, reflecting a growth rate of
> about 90 million a year. For the next several decades, 90 percent of this
> growth will occur in the lesser-developed countries, many already burdened
> by extreme over population for which there is no remedy in the form of
> economic infrastructure, skills, and capital. [3]

  b.   Space involves the places in which towns and cities grew in relative size or in

spaces between them (incorporating smaller cities or towns in a large one), which led to

an almost completely urbanized society, with the great majority of population living in

just a few large places.

Growth of World Population

Year	Developed Countries	(between)	Less Developed Countries
2100	11.2	1.2	10.0
2025	8.5	1.4	7.1
2010	7.1	1.3	5.8
2000	6.2	1.2	5.0
1990	5.3	1.2	4.1
1980	4.4	1.1	3.3
1970	3.7	1.0	2.7
1960	3.0	.9	2.1
1950	2.5	.8	1.7

Total World Population
(billions)

☐ Developed Countries
■ Less Developed Countries

1900

Source: United Nations Population Division
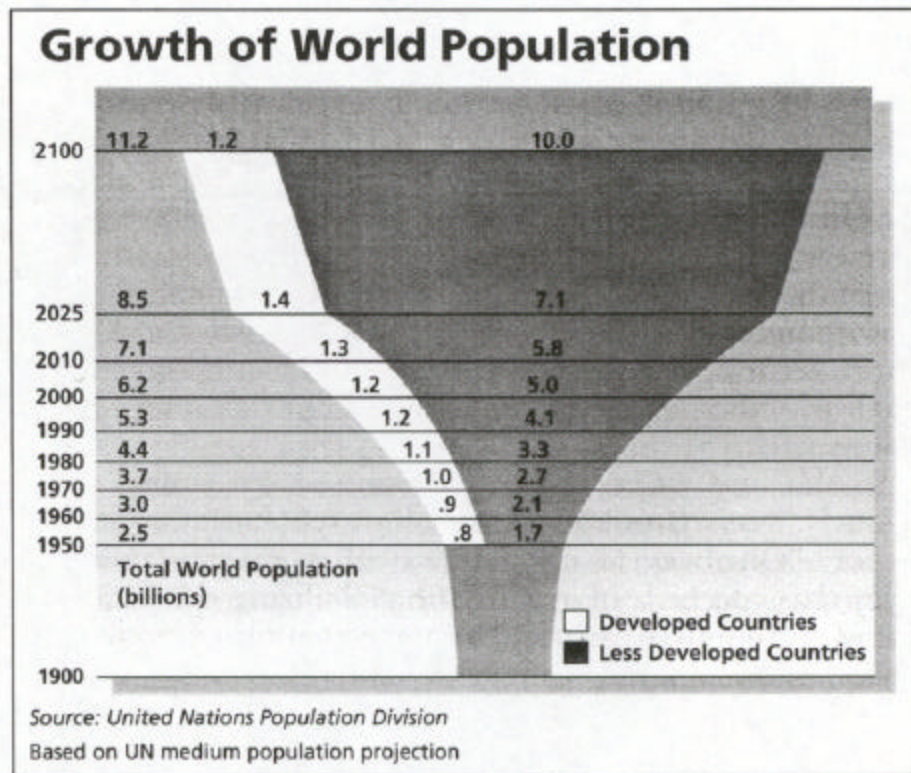Based on UN medium population projection

Robert Mansfield

Figure 2. The Growth of World Population.

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[3] Jablonsky, David "National Power", *Parameters*, spring 1997.

Area and Population of the World

Source: Bureau of the Census, U.S. Dept. of Commerce; prior to 1950, Rand McNally & Co.

Continent or Region	AREA (1,000 sq. mi.)	% of Earth	POPULATION (est., in thousands)							% World Total, 1999
			1650	1750	1850	1900	1950	1980	1999	
North America	9,400	16.2	5,000	5,000	39,000	106,000	221,000	372,000	476,000	7.9
South America	6,900	11.9	8,000	7,000	20,000	38,000	111,000	242,000	343,000	5.7
Europe	3,800	6.6	100,000	140,000	265,000	400,000	392,000	484,000	727,000	12.1
Asia	17,400	30.1	335,000	476,000	754,000	932,000	1,411,000	2,601,000	3,641,000	60.7
Africa	11,700	20.2	100,000	95,000	95,000	118,000	229,000	470,000	778,000	13.0
Former USSR	—	—	—	—	—	—	180,000	266,000	—	—
Oceania, incl. Australia	3,300	5.7	2,000	2,000	2,000	6,000	12,000	23,000	30,000	0.5
Antarctica	5,400	9.3		Uninhabited						
WORLD	57,900	—	550,000	725,000	1,175,000	1,600,000	2,556,000	4,458,000	5,996,000	—

Note: Figures may not add to total because of rounding. Figures for 1950 and 1980 count the former U.S.S.R. as a separate area.

Table 1. Area and Population of the World.

c.   The economy influences the growth of population through one key factor –
industrialization. This factor has increased the rural-to-urban migration and led to an
intense undeveloped/developing country-to-developed country migration. If the second
type of migration can be controlled (not stopped) through political (diplomacy) and
economic (globalization) tools, the first is difficult to be controlled or stopped. These
migrations are a major attraction for many people, especially the young, because
globalization includes industrialization, employment, standard life, medical care, and
education,

> Furthermore, young urban populations generate enormous demands for
> social resources such as education and jobs. The absorptive potential of
> even the strongest urban economy could not meet the economic expectations
> of such an influx.[4]

Controlling the poor-to-rich country migration is one of the most important
attributes of the international organizations and domestic governments, using
globalization as a tool. Globalization promotes faster economic growth, especially
among the four-fifth of the world's population (4.5 billion people) still living in

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[4]Hedelung, LT.COL Robert F., USMC. *"Marine Corps Assault Support and the Urban Century."* MMS
Thesis. Quantico, VA: USMC Command and Staff College, May 2000, p.2.

3

developing countries, to stop this migration.[5]

Two factors influence migration. First is the geography, which involves transportation costs and replacement of domestic and multinational enterprises in cities. Another is the climate, which can produce infectious disease and poor agricultural conditions (involving soil, water, and pests). "Over 160,000 people migrate to the city every day".[6] The future challenge for globalization will be to reduce the rural-to-urban migration. This can be reduced only through appropriate domestic policies such as economic infrastructure development.

d. The social form of urbanization leads to the functional divisions (see Figure 3) of the cities to create urban order. The urban development encourages the division of cities into distinct functional sectors: an administrative center, an economic area, one to several multifunctional sectors, and the periphery.

According to World Bank memos from 1998, the periphery is the most problematic division of a city, from the economic, social and military point of views.[7] The periphery is a big problem for developing countries. Much of the urban growth has taken place on the fringes of cities, beyond the reach and capacity of infrastructure services. Still, the displaced poor will demand these services even though they cannot pay taxes. As a result of this lack of resources to support services, rings of "squatter

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[5] Ambrose, Stefan E., and Brinkley, Douglas G. *"Rise to Globalism: American Foreign Policy since 1938."* Eight Revised Editions, Penguin Books, 1997, p.5. Jeffrey Sachs tried to answer this question by showing how economic growth in developing countries depend on: increased productivity and innovation; free market versus government's protectionism; a new division on labor; open trade which generates new export growth, especially in manufactured goods; and the help of international organizations and developed nations. "In the standard theory, both sides of the great income divide stand to benefit from globalization: the developed countries by reaching a larger market for new innovations, and the developing economies by enjoying the fruits of those innovations white sharing in global production via multinational enterprises."

[6] Cooling, Maj. Norman L, USMC, *"Shaping the Battle Space to Win the Street Fight."* MMS Thesis, Quantico, VA: USMC Command and Staff College, May 2000, p.5.

[7] Michelangeli, Enzo, *"Re: World Bank Memos"*, http://nuance.dhs.org/lbo-talk/9812/0470.html.

suburbs" surround most of the developing cities. Because of overcrowding and open

sewage in these settlements, disease runs rampant. History indicates that these areas,

filled with the disgruntled poor, are inherently unstable and ripe for violent conflict.[8]

Urban sprawl was outstripping many developing countries' ability to provide the

necessary infrastructure and support to their citizens. Generally, the greatest increases

in population over the next 15-20 years will occur in places ill equipped to deal with the

mushrooming growth. As this trend continues, many believe that conflict will break out

as a struggle for resources and basic needs.

> The phenomenon cannot be solved, not even controlled, by the usual tools
> and techniques of urban planning. Such techniques can barely try to
> incorporate the emarginated areas into the urban organism and, in many
> occasions, measures adopted to regularize marginality (introduction of
> public service, paving, housing, etc.) contribute paradoxically to aggravate
> the problem making the migratory movements more attractive. Quantitative
> changes produce, thus, fundamental qualitative transformations and the urban
> problem appear to be totally different."[9]

The process of urbanization described above means that the concentration of

population does not necessarily correspond to the administrative definition of a city.

Consequently, two new concepts have emerged: urbanized area (UA) and metropolitan

area (MA). UA is based upon a density criterion and its boundaries change to reflect

changes in concentration of numbers. MA is based on a high degree of social and

economic interdependence between a large population nucleus and adjacent communities

that, together, are considered part of an integrated urban system. A metropolitan area

consists of a politically incorporated "central city", the county it is in, and all adjacent

counties economically tied to the central city. The area outside the political boundaries

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[8] Cooling, Op.Cit., p.5.
[9] *"Encyclopedia",* p.859.

of "the central city", but within the MA, is referred to as the "ring" and contains suburban

population. [10]
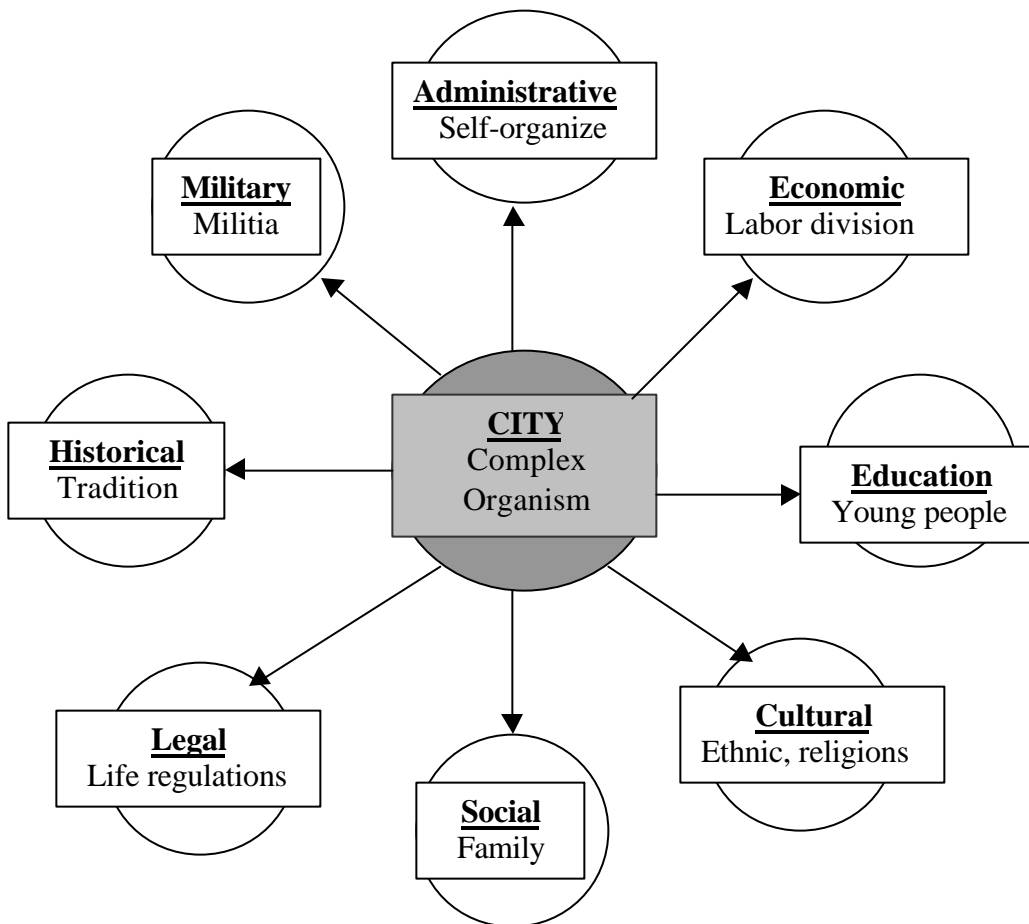

Figure 3. The Functions of a City.

In 1880 only two metropolitan areas, London and Beijing, exceeded one
million. By 1990, 298 had reached that size, with 408 expected by the year
2000. As of 1990, these were the four largest population agglomeration on
the planet. [11]

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[10] *"Encyclopedia of Sociology"*, Vol.IV, University of Washington, Seattle, 1992, p.2199.
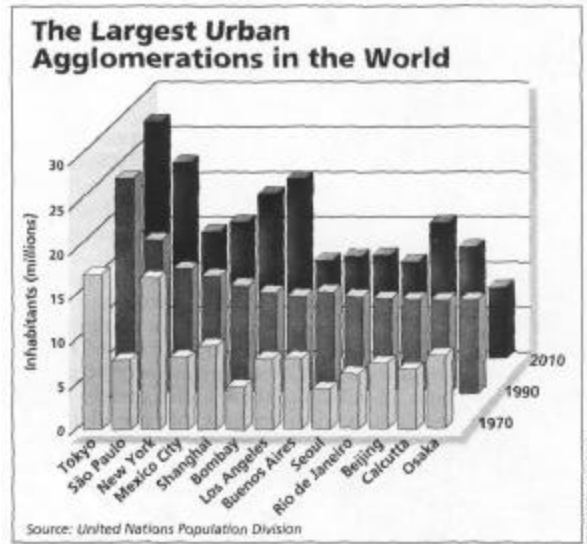[11] Ibid, p.2202.

Figure 4. Agglomerations in the World.

Population of the World's Largest Cities

Source: United Nations, Dept. for Economic and Social Information and Policy Analysis

The figures given here are United Nations estimates and projections, as revised in 1996, for "urban agglomerations"—that is, contiguous densely populated urban areas, not demarcated by administrative boundaries. These figures may not correspond to figures for cities in other parts of *The World Almanac*.

Rank	City, Country	Pop. (thousands) 1995	Pop. (thousands, projected) 2015	Annual growth rate (percent) 1990-1995	Percentage increase for: 1975-1995	Percentage increase for: 1995-2015	Pop. of city as percentage of: Total pop.[1]	Pop. of city as percentage of: Urban pop.[2]
1.	Tokyo, Japan	26,959	28,887	1.45	36.36	7.15	21.56	27.62
2.	Mexico City, Mexico	16,562	19,180	1.81	47.40	15.81	18.17	24.75
3.	Sao Paulo, Brazil	16,533	20,320	1.84	64.56	22.91	10.40	13.27
4.	New York City, U.S.	16,332	17,602	0.34	2.85	7.78	6.11	8.03
5.	Mumbai (Bombay), India	15,138	26,218	4.24	120.79	73.19	1.63	6.08
6.	Shanghai, China	13,584	17,969	0.36	18.71	32.28	1.11	3.68
7.	Los Angeles, U.S.	12,410	14,217	1.60	39.03	14.56	4.65	6.10
8.	Calcutta, India	11,923	17,305	1.81	51.15	45.14	1.28	4.79
9.	Buenos Aires, Argentina	11,802	13,856	1.15	29.07	17.40	33.95	38.54
10.	Seoul, South Korea	11,609	12,980	1.92	70.52	11.81	25.85	31.81
11.	Beijing, China	11,299	15,572	0.87	32.23	37.82	0.93	3.06
12.	Osaka, Japan	10,609	10,609	0.23	7.77	0.00	8.48	10.87
13.	Lagos, Nigeria	10,287	24,640	5.68	211.73	139.53	9.21	23.28
14.	Rio de Janeiro, Brazil	10,181	11,860	1.00	29.63	16.49	6.40	8.17
15.	Delhi, India	9,948	16,860	3.85	124.76	69.48	1.07	4.0

(1) Denotes percentage of the total population of the country in which the city is located. (2) Denotes percentage of the total urban population of the country in which the city is located.

Table 2. Population of Metropolis.

Metropolis over 10 million are a recent phenomenon, and their number is increasing rapidly (see figure 4 and table 2). Their emergence can be understood only within the context of a globally interdependent system of relationships – globalization.

In 1960 only four metropolitan areas exceeded 10 million (Tokyo, New York, Shanghai, and London). Twenty-five cities are expected to be over 10 million

by the year 2000, eighteen of them in the less-developed world.[12]

In conventional military operations the importance of urbanized terrain has increased over time. Clausewitz, one of the theorists who examined this subject, deemed the importance of cities as first and foremost in support of defense, in the following ways: as secure depots; as protection for large and prosperous areas; as real barriers; as tactical points of support; as a staging post; as a refuge for weak or defeated units; as an actual shield against enemy attack; as cover for an unoccupied province; as the focal point for a general insurrection; and as a defense of rivers and mountains areas.[13]

Contemporary military thinking also describes urban areas as normally important for several reasons. One reason is that cities often lie across one or more lines of communication (LOC). Enemy concentrations within the urban area present a serious threat if the city is passed. Gaining control of certain assets or resources within urban areas is often critical to other objectives. The last reason is that a city often has psychological, symbolic or political importance, which constitutes a trump card at the bargaining table.[14]

Military personnel and civilians view urban areas differently. The military always views this environment as necessary for decisive operations. Because of high losses in lives and property, civilians hate the fights in cities.

> The very name of urban warfare is unpleasant and unpalatable, and probably unacceptable to the American people. It could become as much so as the name of chemical warfare in recent decades, and as repugnant to the masses as it the thought of nuclear war.[15]

The nature of sub national conflict in the third world is being altered and

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[12] Ibid, p.2202.
[13]Clausewitz, Op.Cit., p.394.
[14]Cooling, Op.Cit., p 3-4.
[15] Ibid, p.132.

exacerbated by population growth and rapid globalization. Many of rural population

migrated to urban areas and some population from undeveloped/developing countries

were moving to developed countries in desperation, poverty, hunger, and escaping from

sub national conflict. Many existing population centers are overwhelmed and unable

to support logistically the anticipated crush of dislocated refugees. The urbanization of

the developing world will influence how Romanian military officers organize, equip for,

fight, and conduct military operations in such environment in the future.

Historical Perspectives of Using Cities in Battle.

Urban areas were important since the Ancient Greeks. Greek cities acted as a

force multiplier for a defense. A small force with proper training, equipment, and

coordination could defend effectively for an extended period of time against a larger,

more sophisticated aggressor.[16] This was the case of the Athens during the

Peloponnesian War (431 – 411 B.C.), illustrated in Pericles' strategy against Sparta,

when the outnumbered Athenians retired beyond the city's walls and resisted

against the well trained and massive Spartan army.

> They [the Athenians] were to prepare for the war, and to carry in their
> property from the country. They were not to go out to battle, but to
> come into the city [Acropolis] and guard it…The Athena best war
> strategy was the city's financial and military resources.[17]

In the last century, cities were seen as the creators of wealth in an increasingly

urbanized world. Controlling the cities has always been vital to military success and

preparation to fight in cities was crucial to military efficiency and the preservation of the

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[16]Everman, MAJ Mark P., USMC. *"Marine Aviation: Relevant in MOUT?"* MMS Thesis. Quantico, VA:
USMC Command and Staff College, May 1997.
[17]Strassler, Robert B., *"The Landmark Thucydides: a Comprehensive Guide to the Peloponnesian War"*,
The Free Press, New York, 1996, p.98.

lives of soldiers. Today, combat in urban terrain has been complicated by other factors:

> Although mankind has engaged in urban combat from the sack of Troy
> down to the siege of Sarajevo, Western militaries currently resisted the
> practical, emotional, moral, and ethical challenges of city fighting.
> Additional contemporary players, such as the media, and international and
> non-governmental organizations (NGO), further complicated urban combat.
> The U.S. military had to stop preparing for its dream war and got dawn to
> the reality of the fractured and ugly world in which we live – a world that
> lives in cities.[18]

After World War II, modern armies including the Romanian army operated more

in urban terrain than in other environments (see Appendix A). Operations in urban

environments are difficult and costly in terms of time and resources. Due to the natural

and man-made features of the urban terrain, mobility, communication, and observation of

fields of fire have been severely restricted.

Not all conclusions and lessons learned from conflicts using urban terrain in

defense or offense were studied and applied to subsequent conflicts. Several cases

illustrate problems of urban combat. Five have been selected in this paper to underline

these conclusions and lessons learned. These cases are: Hue City; Beirut; Mogadishu;

Grozny; and Gaza. Hue City demonstrated a tendency for urban operations to

accomplish operational objectives through tactical fights. The battle for Hue City during

the Tet Offensive of 1968 was the largest battle fought by the United States in a city since

Seoul during the Korean War. Hue represented the third largest Vietnamese city, with a

population of approximately 140,000, located on the both banks of the Perfume River.

After 23 days of fighting, Hue demonstrated the difficulty of shaping the battle space at

the operational level in response to a surprise attack in a built-up area. At the same time,

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[18] Watson, MAJ Leah USMC. *"The Use of Military Force in Combating Urban Crime Using British Royal Marines in Northern Ireland as a Model."* MMS Thesis. Quantico, VA: USMC Command and Staff College, May 1996.

Hue illustrated the importance of unity of command, the need to position the commander and his staff in a place to synchronize all elements throughout the urban infrastructure.

There were three concepts studied and applied in the Vietnamese cities. The first one was maneuver, to isolate enemy from its base of support. The second was the utilization of those tactical forces specially trained, equipped, and organized for conducting operations in that environment. The last was the urban logistic plan, to include provisions for refugee flow and care. The protection of civilians was a concern at the highest level of command. [19]

Beirut is the second case, which shows the problems of urban terrain. It took 45 days for Israeli forces to capture the city of Beirut. During the "Peace for Galilee" campaign in 1982, the walls of Beirut and the staunch resistance by its defenders meant that the city could be defeated only using joint forces (Army and Air Force) to obtain a synergetic effect. This campaign demonstrated once again that a battle in city is a prolonged war.

Mogadishu is the Somalia capital and a typical third world city. With a population increased to 1.5 million due an influx of refugees, large inadequate infrastructure, poorly constructed concrete buildings and virtually non-existent lines of communication (LOCs), Mogadishu represented a difficult challenge for the United Nations troops. A skilled Somali tribal warlord confronted American forces asymmetrically, bringing U.S. forces into the close confines of a city he largely controlled. The lack of intelligence was the greatest problem for the United States operations in Somalia. Human Intelligence (HUMINT) was the single communication

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[19] See for exemple, Gaddis, John L. *"Strategies of Containment: a Critical Appraisal of Postwar American National Security Policy."* Oxford University Press, New York, 1997.

architecture for operations within cities, hardly facilitating the direct transfer of information from supporting forces to the forces on the streets.   In Mogadishu, the synchronization between different services was not realized. This absence of synchronization led to unnecessary casualties and to the failure of the mission.

Both Russian military campaigns in Chechnya underlined, in a negative way, that Civil Affairs and police activity take on heightened importance in the urban environment. Grozny was the final phase for the Russian campaign, considered easy to conquer using Internal troops. Because the Russians expected little or no active resistance, they did not anticipate a requirement to "seize" the city. They assumed the operation would be another Prague of 1968, where the mere presence of tanks would intimidate the adversary into capitulating. At the same time, these campaigns focused on a plan for an aggressive media campaign to win public approval. A mountain fortress like Grozny, resisted the entire Russian Armed forces making their campaign a failure. The non-linear nature of urban guerillas and the urban areas in which they fight thwart conventional forces attempts to fight a "single battle".

 The Gaza Intifada (1987 – 1993) demonstrated the necessity of updating urban counterinsurgency measures to eliminate the popular support of insurgent infrastructure. Popular support for unconventional forces in cities, especially in the periphery, is significant. This support is increased by poverty and discontent.[20]

The increasing urbanization of many of the world's trouble spots posed unique challenges to the 20th century war fighters. Urban terrain was perhaps the most likely battlefield of this century and, as critical battles were won and lost there, the military had to address training, preparedness, and modernization issues, as they relate to MOUT.

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[20] Molofski, Op.Cit., p.15.

Tactics, procedures, techniques, and technologies need to be developed and evaluated

for implementation in the urban landscape. The lessons learned in such places as Hue,

Panama City, Mogadishu, Bucharest, Sarajevo, Grozny, and Belgrade need to be studied

and applied to present-day and future conflict situations in built-up areas. All these

examples illustrate the special problems or challenge's opportunities that urban terrain

presents. From Hue to Grozny, the urban terrain affected in different ways the

belligerents. Based on the above cases the urban areas can be classified by their

implications for MOUT. This classification is our next subject.

Classification of Urban Areas

The classification of urban areas depends on several factors, which have

implications for MOUT: geography, economy, society, population, and military (see

Figure 5). The number and classification of the population are very important for

establishing the quantity and quality of the defender. The number and characteristics of

buildings and of adjacent terrain are important for establishing the nature of defense,
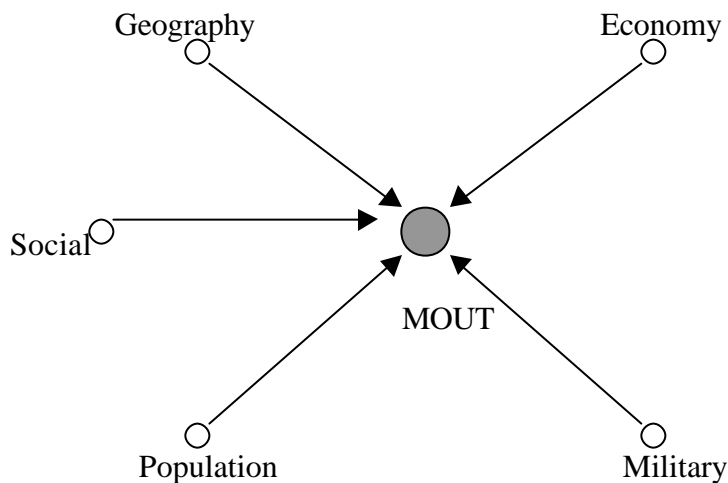
firepower and maneuver.

Geography   Economy

Social

MOUT

Population   Military

Figure 5. Factors which Influence MOUT.

The existence of military bases, airports, and ports in cities has great importance in MOUT to establish the joint character of an operation, the nature of defense and force protection. One of these factors is geography and can be classified as:

a. Mountain urban area, characterized through small number of inhabitants, large spaces between neighbors and between areas, small and non-fire resistant buildings, protected and covered by the environment, easy to defend, and hard to conquer;

b. Urban areas situated on hills and tablelands, with a larger number of inhabitants and buildings (some fire resistant and some not), smaller spaces between neighbors (but the same large spaces between areas), not so covered but protected by the environment, easy to defend, and not so difficult to conquer;

c. Plain urban areas, the largest localities in number of inhabitants and buildings (majority fire resistant), very dense, uncovered and unprotected by the environment, difficult to defend, and easy to conquer;

d. Harbors, located in the lower basin of rivers and on littoral areas, marked by a tendency to increase their number of inhabitants and buildings (all fire resistant), semi protected by water, easy to defend, and the most difficult to conquer.

Another type of classification concerns economic factors:

a. Touristy urban areas, especially stations (mountain, littoral, water), or historical localities, with a small number of permanent inhabitants, and a fluctuating number of visitors; their buildings are dense and fire resistant. This type of urban area is not prepared for defense.

b. Agricultural urban areas, especially villages and small towns, with a small number of inhabitants, who work in rural areas during work seasons; they are not

14

prepared for defense and easy to conquer during work time; part of them are home base for military units;

c. Industrial urban areas (cities and towns), with a large number of inhabitants and buildings (big and fire resistant); these areas can be centers of communications, railroads and highways knots, can shelter military bases and headquarters, airports and ports, and normally have an industrial area. Industrial areas can be dangerous for both defender and attacker because of the presence of chemical and pharmaceutical factories and depots, oil and natural gases depots.

But the most important classification is linked to population, both number and architectural structure or society. The number of population is a key factor for military manpower. Urban areas can be divided into: villages (lower than 10,000 inhabitants); communes / small towns (10,000 – 50,000 inhabitants); towns (50,000 – 100,000 inhabitants); cities (100,000 – 1,000,000 inhabitants); and metropolis (more than 1,000,000 inhabitants).

The "human architecture" constitutes the development of inter-society relationship.   This relationship includes rules for common life, culture, religion, and family. From the "human architecture" point of view, there are three broad types of "mass terrain", with different implication for MOUT:

a. Hierarchical cities (Paris, Athens, American cities), characterized by broad acceptance of the rule of law, citizenship responsibilities, united citizenries, prolonged resistance to an attacker, but the easiest to govern once occupied (if the population recognizes its interests lie in collaboration);

b. Multicultural cities (Jerusalem, Dili – East Timor, Grozny – Chechnya),

characterized by ethnic divisions struggling for dominance. These struggles consist of subversive acts by group of people to usurp the government authority, religious and resistance organizations, and crime syndicates. Cultural differences can create a sense of assault on group values from the outside. This type of city, which has a tendency to develop along the "fault lines" between civilizations are easy to conquer (with the aid of oppressed minorities) and difficult to administrate after peace has been established;

      c. Tribal cities (Mogadishu, Kigali, Dushanbe, Karachi), deemed as traditional rural societies growing overpopulated and impoverished. These cities have ethnic conflicts based upon differences in blood (clans), genocide against relatives, slaughter of neighbors, and the most difficult urban environment for peace support operations (PSO), which pose difficulties for intervention force or peacekeepers on multiple levels.[21]

Can the urban area be a center of gravity in the enemy defense system? If the city is the capital and the most important economic, political, administrative and cultural center, Clausewitz says yes. Today, the capital is viewed as a center of such important activities as: the administrative center of transnational corporations; the government; the administrative center of international organizations; the administrative center of domestic organizations; proper areas for summit and high level meetings; the most important center for an economic branch; and a cultural center.

Urban areas are not only the site of political power, but also the location for transportation, telecommunications, logistics, and industrial and energy sources. In addition, urban areas serve as the repository for cultural assets, and the location for

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[21]Ralph, Peter   "The Human Terrain of Urban Operations", *Parameters*, Spring 2000, p.21-25.

international organizations and transnational corporations. Two distinct factors

suggest that military involvement in urban operations will become more relevant: the

current global urbanization tends, and the search by weaker adversaries for means to

influence international decisions by negating technologically superiority.

Chapter 2

Military Operations on Urbanized Terrain (MOUT)

> *"…the capture of a city must always*
> *be considered as a necessary evil."*
> Clausewitz[22]

After the brutal combat in city streets around the world was over and the depicting

images transmitted by media about this aggressive fighting terrified international and

domestic public opinion, cities were declared dangerous and foreboding places where it is

nearly impossible to conduct a war. The only solution seemed to be to avoid entering

cities at all costs.

Unfortunately, if demographers and political strategists are correct, the reality is

that not only were most military operations of the last five decades conducted in and

around large urban areas, the trend is likely to continue. Cities – and those connected

clusters of cities called "conurbations" – increasingly are the political, economic, social,

and cultural epicenters around the world. The control of large urban areas is critical to

the successful accomplishment of strategic, operational, and tactical objectives in

conflicts.[23]

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[22]Clausewitz, Op.Cit., p.551.

[23] Hahn II, Robert F., and Jezior, Bonnie "Urban Warfare and the Urban War Fighter of 2025" ,*Parameters*, Summer 1999, p.74.

MOUT.   Definition and Characteristics

MOUT are those tactical operations conducted in urban area, which generate slow tempo, high casualties, and bad press. "The acronym MOUT classifies those military actions planned and conducted on a terrain complex where manmade construction impacts on the tactical options available to commanders."[24] Cities negate any superiority in manpower, firepower, or logistics. The urban battlefield in many ways negates those technological advantages, forcing the combatants into close quarters with reduced visibility and restricted line of sight. Because of high and unacceptable casualty rates, they necessitate, but are not limited to, foot mobile infantry as the best instrument to use. Unlike open terrain, high attrition and small unit autonomy characterize urban warfare. One good example that illustrates these characteristics is the Soviet advance toward Berlin in 1945, during World War II. This advance began on April 16 and ended on May 8, after Hitler's suicide (April 30) in his Berlin bunker and the unconditional surrender of German troops (signed by Grand Admiral Karl Doenitz on May 7, at Eisenhower's headquarters). During 22 days of violent fighting, German troops ceased their resistance against the Americans and British, but faced east and fought desperately to avoid falling into Soviet captivity. For the Soviet armies, this prolonged siege cost almost one million people.[25]

Tactical doctrine today stresses that urban warfare should be conducted only as a last resort. Urban areas should be isolated and bypassed rather than risking a costly, time-

consuming operation in a difficult environment. Urban warfare may be conducted in

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[24] _____ *"FM 90-10. MOUT.",* p.1.

[25] _____ *"World War II"*, Encarta Encyclopedia, http://encarta.msn.com/find/concise.asp?mod=1&ti=02FF7000&page=1, p.14-15.

order to capitalize on the strategic or operational advantages that possession of a

particular urban area gives or to deny these advantages to the enemy (see figure 6).

> Major urban areas represent the power and wealth of a particular country
> in the form of industrial bases, transportation complexes, economic
> institutions, and political and cultural centers. The denial or capture of
> these centers may yield decisive psychological advantages that frequently
> determine the success or failure of the larger conflict. Villages and small
> towns will often be caught up in battle because of their proximity to major
> avenues of approach or because they are astride lines of communications
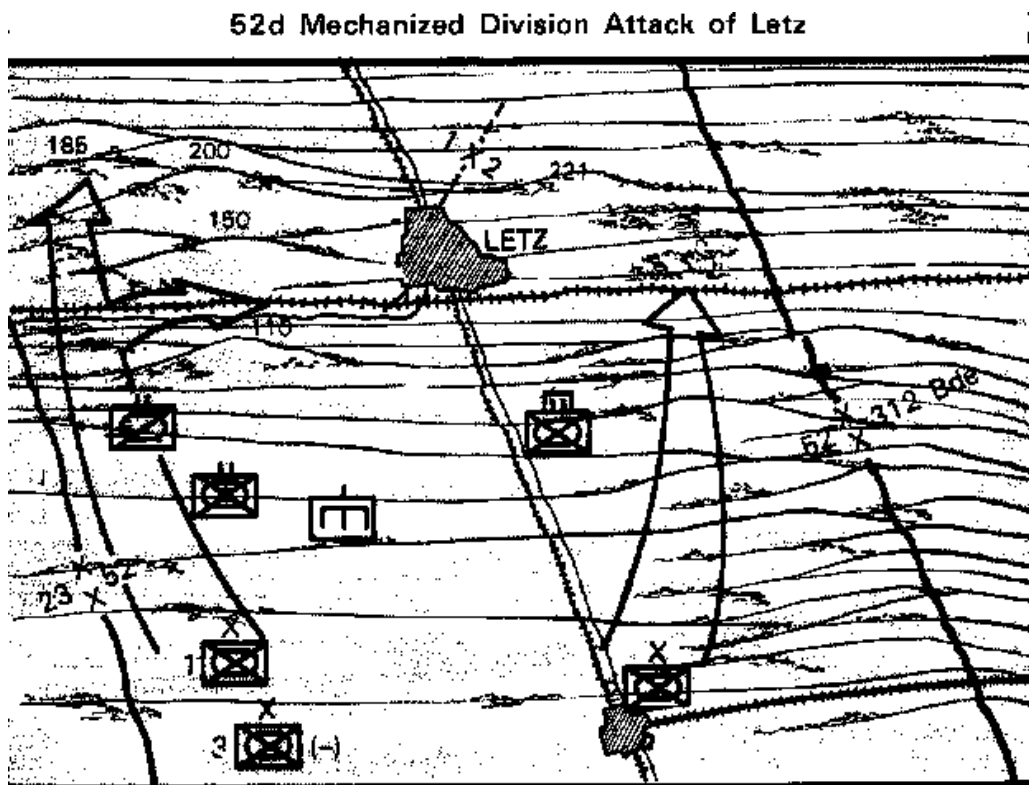> that are vital to sustaining ground combat operations.[26]

Figure 6. Dominance on an Urban Terrain.

An example of operational doctrine associated with urban warfare is provided by

the Soviet Union and has been incorporated into Romanian doctrine. The first element in

the doctrine is that unless able to defeat the force in a swift surprise attack, the enemy

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[26] Ibid, p.1.

force has to be isolated from the outside by envelopment or encirclement. This practice will permit the Romanian Armed Forces to defeat the enemy or entice them to retreat out into the open and be defeated there. The second principle is to operate as small units in coordinated attacks on key enemy resistance points in the area.[27]

Why is the urban fight so distinctive? There are four factors that make urban warfare different from other environments (open terrain, jungle, desert, river, mountain, etc.) First, there is a tendency for the levels of war to merge in urban operations, which indicates that, typically, there are no clear-cut distinctions between the strategic, operational, and tactical level of war. For example, Hue City demonstrated that, without strategic and tactical detail, it would be difficult to justify listing operational lessons learned from the battle that specifically pertain to urban conflict. Mogadishu inhibited the operational commander's ability to properly shape the battle space for the introduction of forces at tactical level. This resulted in an embarrassing, though arguably successful, tactical mission that, in turn, produced a strategic defeat for both the United States and the United Nations. Mogadishu demonstrated that, under the intense scrutiny of the international media, all tactical actions routinely have implications at the operational and, occasionally, the strategic level of war.

The necessity of centralized planning but highly decentralized execution is another factor which distinguishes urban environment from others.

> The young soldier or Marine on the ground must make the right tactical decisions, without immediate supervision, or risk compromising national objectives. Conversely, because of this risk, operational commanders often make decisions during both the planning and execution of urban operations

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[27] Dzirkals, Lilita I., Konrad Kellen, and Horst Mendershausen *"Military Operations in Built-Up Areas; Essays on Some Past, Present, and Future Aspects."* R-1871-ARPA. Santa Monica, CA: The Rand Corp., June 1976, p.32.

that would normally be left to tactical commanders in other environments.[28]

The asymmetric approach of urban warfare is the third factor that makes MOUT unique. The technological advantages of attacker versus a wide variety of barbaric methods of defender, to slow the tempo of military operations, to create a large number of casualties, and to break the will of the public, both internationally and domestically. The attacker seeks to achieve victory, while the defender needs only to avoid defeat.

The last factor that makes urban military operations unique from other forms of warfare is the presence of a large spectrum of actors in urban area: military professionals; militia personnel; terrorists; mercenaries; paramilitary organizations, and non-combatants. Even if the military and militia personnel can be distinguished, other actors are very difficult to distinguish in such environment.

Preparation

Urban warfare can be conducted both in offense and defense. When a military force is in defense in urban terrain, "…everything is very simple, but the simplest thing is difficult."[29] Defensive operations are simple on urbanized terrain, but it is difficult to prepare such operations. When the same force is to undertake an offensive operation on urbanized terrain, things are more complicated, both in preparation and conduct.

What must the operational commander keep in mind when preparing a MOUT? First, he must remember the place and role of his forces in the strategic plan; that is whether he is to defend or liberate a major urban area in defense; act as isolation force, attack force, or clearing force in the offense; or as supporting force or reserve in both

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[28] Cooling, Op.Cit., p.128.
[29] Clausewitz, Op.Cit., p.398.

operations.

Next the operational commander must understand the desired end state and political objectives, his higher commander intent (strategic objectives), and his mission (operational objectives) across the spectrum of conflict in a single urban operation (from humanitarian assistance to full blown warfare, including the possible use of weapons of mass destruction – WMD). Each type of conflict requires significant depth of talent in a variety of skill sets. While conducting operations ranging from humanitarian assistance to mid-intensity conflict, commanders at each level will struggle to meet the disparate challenge of both the belligerent and the civilian population. Often they are performing operations situated at the opposite sites of this spectrum, simultaneously.

The physical nature of the urban environment is very important to the operational commander. There are "three dimensional" aspects of urban infrastructure: streets, roofs, and underground. Each dimension necessitates special attention and a different approach. Appendix B provides detailed combat characteristics of various types of built-up areas for offensive and defensive operations.

The last, and perhaps the most significant aspect that an operational commander must not forget is the presence of both non-combatants and media in the battle space. This presence consistently plays a restrictive role on the employment of lethal fires, and a struggle to balance force projection concerns with minimizing non-combatants casualties and maintaining legitimacy. "Non-combatants can be used by adversaries as human shields, as sources of intelligence, and/or instruments to shape international public opinion."[30]

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[30] Goligowski, Steven P. *"Future Combat in Urban Terrain: Is FM 90-10 Still Relevant?"* Fort Leavenworth, KS: U.S. Army Command and General Staff College. School of Advanced Military Studies, 1994, p.5.

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Preparing an *offensive* operation on urbanized terrain, operational commanders and their staffs have to answer multiple questions. Is this urban area required to support future operations? Is bypassing of this area tactically feasible? Are there any critical objectives (a vital bridge, transportation, strategic industrial or vital communications facilities, etc.)? Does an offensive operation in this urban area deal the enemy a decisive psychological blow? Has this urban area been declared an "open city" to preclude civilian casualties or to preserve cultural or historical facilities? Is there sufficient forces to seize and systematically clear this area?

An offensive operation must be tailored to the urban environment based on a detailed analysis of each urban terrain setting, its type of built-up areas, and existing structural forms. The general considerations apply to the basic categories of urban areas are shown below in Table 3.

Historically, the attack planning on an urbanized battlefield followed the same general process for planning as an operation in open terrain, with some specific modifications. The offensive in an urban warfare may take only the form of a hasty or surprise attack. The congestion and incomplete intelligence requires the hasty attack to move through, rather than around, the fixing force. Techniques of control and coordination become extremely important to prevent unnecessary congestion at the edge of the urban area in that kind of attack (see Figure 7). The balance between fixing force and combat power committed to the main effort on the hasty attack is the commander's "genius".

URBAN AREAS	DECISION	CONSIDERATIONS
Metropolis	Political and strategic considerations. UN, NATO, EU, other international or regional organizations. National Commandment level	Political consequences. Not attack in their entirety. From attack of smaller built-up areas to the central complex with joint and combined forces. A series of coordinated combat-in-cities actions fought at small-unit level. The whole range of military operations: attack, defense, and retrograde.
Cities	Operational considerations. CINC and JTF Commander.	Civilian casualties and significant collateral damages. Psychological consequences. Deliberate attack with joint forces.
Towns	Tactical considerations. Corps or division commander.	Major forces and significant time are required to secure such objectives. A hasty attack by heavy, mobile forces on the flank or rear of the town.
Communes/Strip Areas	Tactical considerations. Large unit and unit commander.	Must maintain the momentum of task force attack. The alternative of not attacking exists. Penetrated at their narrowest point by a fast-moving armor-heavy force supported by suppressive fires and smoke obscuration.
Villages	Tactical considerations. Small unit commander.	Frequently encountered. Prepared by enemy as strong points. Bring overwhelming force to bear and suppress mutually supporting positions. House-to-house fighting

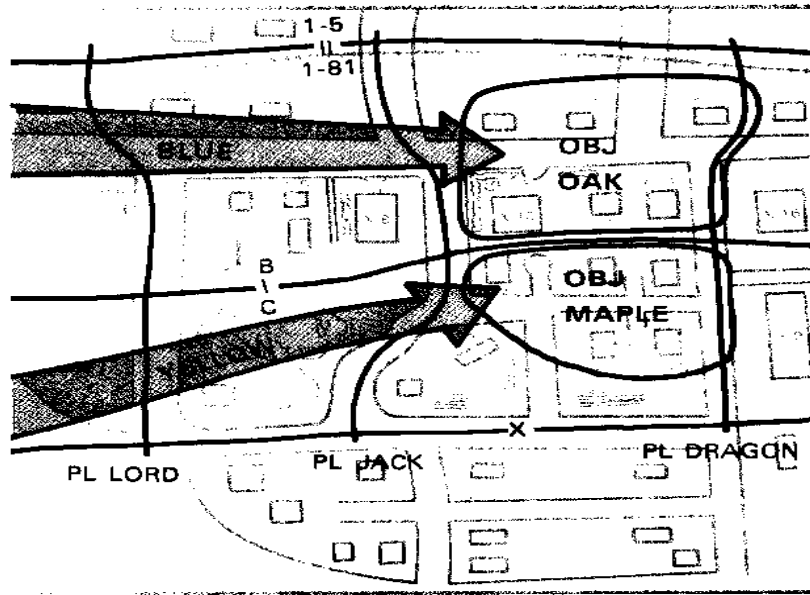Table 3. General Considerations for Urban Areas.

Figure 7. Coordination Measures in a Hasty Attack.

A surprise attack is necessary when the defense is extremely prepared or the urban obstacle is very large (cities, megalopolis, and industrial areas). The attack may be divided in three basic phases: isolation, assault, and clearance (see figure 8). These phases can be accomplished sequentially or concurrently. To isolate an urban area means to encircle it or to cut off all LOCs, which converge to this area. The isolation phase is equivalent to a siege. This phase is the most important for surprise. Isolation can be achieved encircling or cutting off the LOCs near the city or far from urban area to preserve surprise. Assault is the phase where the surprise reaches the maximum limit. An attacker can attack a city without isolating it, but this means an open area for the defender to reinforce or to escape. During the assault phase, the main effort of an attacker is oriented toward the operational objectives (principal buildings). The last phase, clearance, means to control the entire city. During this phase all buildings and areas into the city are verified and occupied by the attaching force. Seoul was attacked without being isolated but did apply the other two phases: assault and clearance.

Clearance Zones

ZONE K

CITY OF LETZ

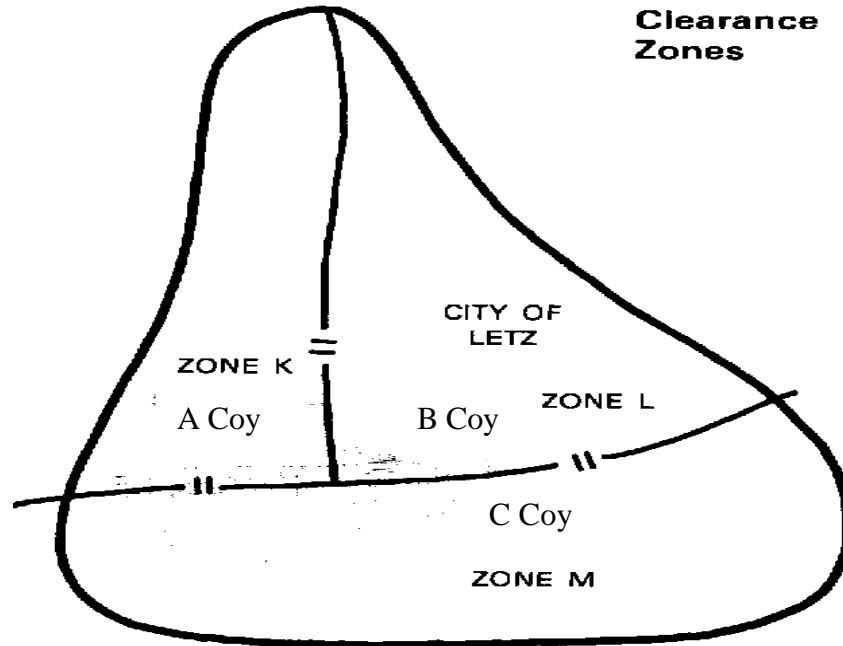A Coy   B Coy   ZONE L

C Coy

ZONE M

Figure 8. Clear the Urban Area Phase.

Frequent commitment and reconstitution of reserves is a characteristic of the surprise attack. Mobility and suppression are required to maintain the momentum of the assault forces. Maintaining the momentum is linked with limited visibility and night attack to rupture strong positions, and to minimize enemy mutual support. "Speed is life in urban combat."[31]

> The need for detailed planning is not new to combat but is vital to urban combat. A detailed plan helps in effective command and control, the integration of combined arms and in reducing friction caused by the nature of the urban environment.[32]

Because of cultural assessment necessity and speed, the intelligence process, key to any military operation, becomes even more crucial for successful urban warfare. This

[31] Cole, COL Ray, USMC. *"Land and Littoral Warfare."* Overhead Briefing Slides for Joint War fighting Capabilities Assessment Division. Washington D.C., October 1996, p.29.

[32] Goligowski, Steven P. *"Future Combat in Urban Terrain: Is FM 90-10 Still Relevant?"* Fort Leavenworth, KS: U.S. Army Command and General Staff College. School of Advanced Military Studies, 1994, p.32.

process must quickly establish which zones in the urban area are more likely to be

attacked (Appendix C). The following additional information is required: natural terrain

adjacent to a urban area that support the enemy's defense, or that which will provide

attacking forces with observation posts; cover and conceal routes to the urban

area and to objectives within the urban area; critical objectives within the urban area that

provide tactical advantages; tactical characteristics of the urban area and its structures;

belligerent and the population's culture in the urban area; and international and domestic

laws' constraints in the urban area.

A detailed plan must contain explicit control and security measures for

decentralized execution at the lowest level to coordinate, control and secure forces and

fires in an urban environment. There are many easily identifiable features in an urban

area (street corners, buildings, railway crossings, bridges, etc.) that may be designated as

checkpoints or contact points, but they are difficult to see until seized. While trying to

seize key points, spoiling attacks and infiltration of the flanks and rear of attacking forces

can often be used. The requirement for maintaining the continuity of the attack results in

bypassing isolated resistance, which compounds security problems. For all these reasons,

additional measures must be taken to guard against sabotage, guerrilla warfare,

intelligence-gathering by a hostile population, flank and rear protection, and combat

service support and combat support escort.

In *defense*, the questions, which must be answered by a planner are

various. Should all urban area features be incorporated in a defense plan? What

key positions must be incorporated? Has the defender enough forces to protect the key

positions? Will the enemy attack the urban area or bypass it? Which buildings are under

the protection of international law?
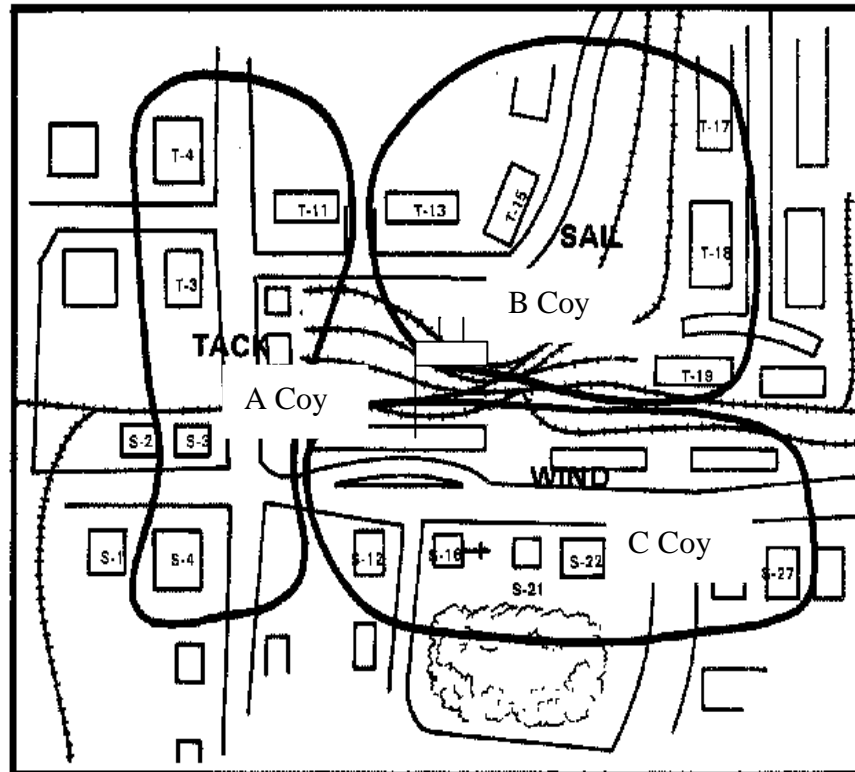
Figure 9. A Defensive Position at Battalion Level.

The natural and manmade urban area features act as a force multiplier for a defender. Urban sprawl provides covered and concealed positions to the defender, and restricts the attacker's mobility and vision. Strong points like towers, walls, large buildings, are the vital keys for any defense in urban terrain. These points can be occupied and prepared by dismounted infantry. Such points can support each other by fire and strong mobile reserves. All strong points from a urban area make up a position defense (see Figure 9). This position is organized in depth and supported by other strong mobile forces and is called the main battle area (MBA). If the defender has enough time to prepare the urban area for defense, he will establish a covering force area (CFA) to control enemy approaches to the urban area. Engineer units reinforce the obstacles of

the terrain and maintain withdrawal and attack routes, through artillery and air defense fire support. If one or more critical objectives are estimated in the urban area, it is imperative to initiate the defense of the urban area as far forward as possible to avoid a protracted battle.

The operational objective of the defender in an urban area is to reduce the momentum of the enemy's attack and his ability to maneuver. To fulfill this objective, an operational commander must take into consideration the following factors: the urban terrain degrades command and control by reducing the capability of direct observation and by interfering with radio communication; the defender must be prepared to counter enemy attacks launched at night or under other conditions of limited visibility; and timely and accurate situation reports are more critical to the commander in this environment.

Conduct of Operation

High-speed urban operations require a radically new joint combat capability. While it may appear to many to be an evolutionary offspring of the existing land combat concept(see Figure 10), the new urban confrontations must rely upon a revolutionary new man-machine fighting system with self-contained C4ISR (command, control, communications, computers, intelligence, surveillance, and reconnaissance), lethality, mobility, survivability, and sustainability far exceeding those of the current system.[33]

The most important war fighting functions in MOUT are three: maneuver, firepower, and logistics. All war-fighting functions are important in any type of operations, but these three have unique aspects in MOUT. The first important function, *maneuver*, comprises two aspects: mobility and movement.

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[33] Hahn II, Op.Cit., p.4.
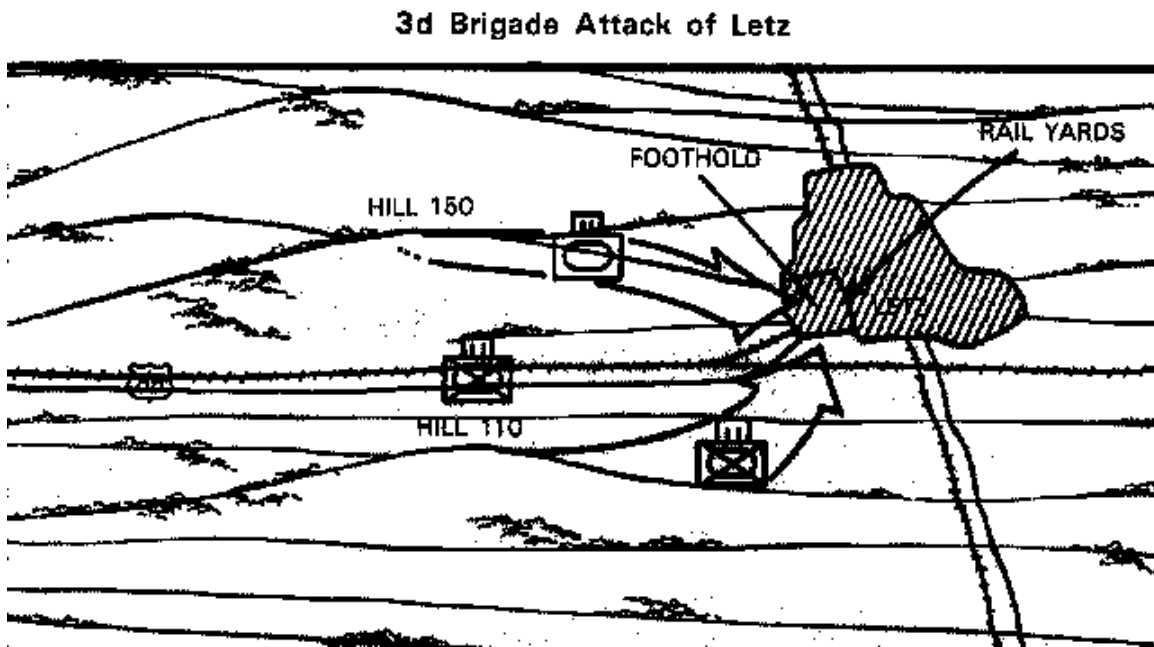
Figure 10. Land Urban Battle Concept.

        If a fight in an urban area is unavoidable, an increased speed and tempo of

military actions within this environment are mandatory to avoid a prolonged war and

many casualties. Increased speed and tempo, which is mobility (see Figure 11) is part of

maneuver. Mobility can embrace many forms, from advanced urban combat vehicles to

the individual soldier in both the horizontal and vertical dimensions. Individual mobility

is enhanced by unmanned ground vehicles (UGVs) that will carry much of the load

currently borne by the soldier, and by small individual aerial assault systems to move

soldiers vertically and horizontally (vertical assault urban light transporter – VAULT).

Reducing the inherent weight of the load components and the logistical need is another

way to increase mobility.[34] Finally, air mobility enhances the ground forces ability to

move quickly. Air mobility can cover greater distances in less time. Air power provides

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[34] Hahn II, Op.Cit., p.5.

flexibility; pick-up and delivery and can occur at either ground or roof top level. Ground and air mobility and the reduction of logistics provide operational commanders with the speed required for gaining the advantage in operational tempo.[35]
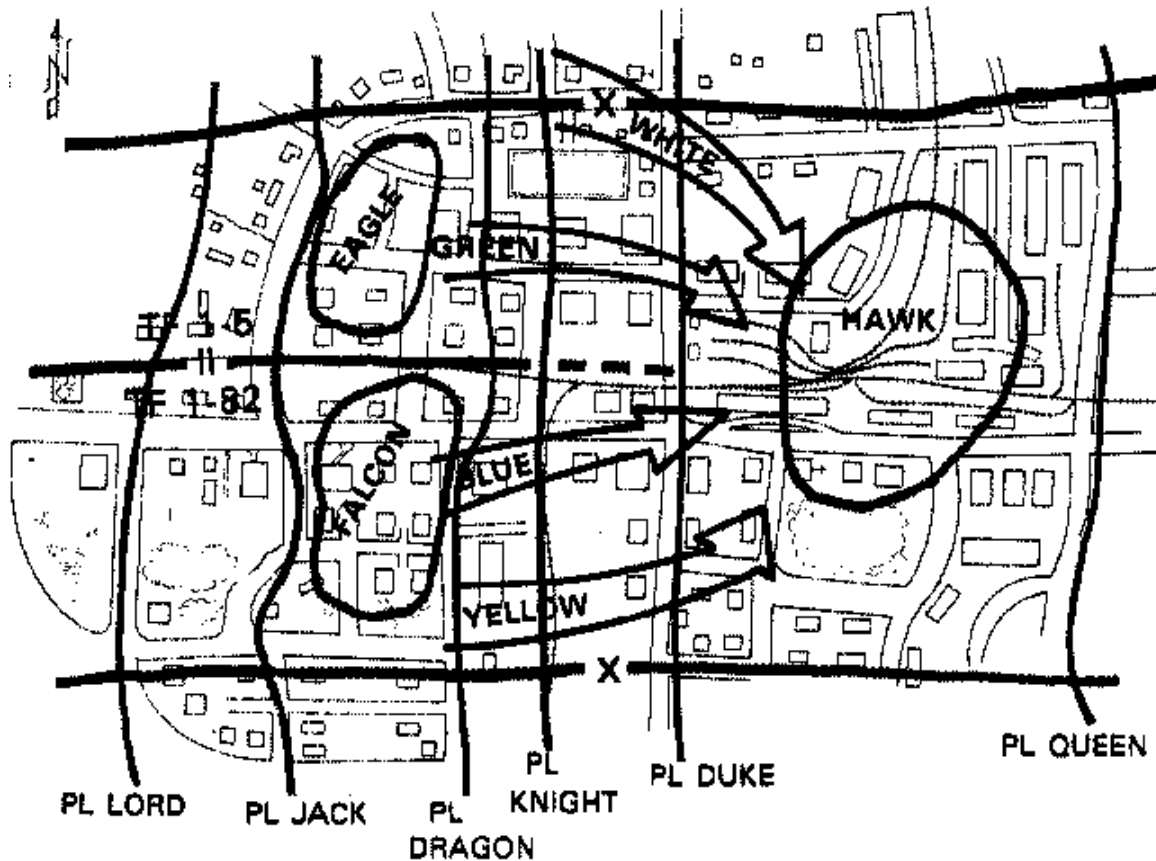
Figure 11. Mobility at Brigade Level.

Movement is the other part of maneuver. To realize the first phase of urban warfare – isolation, the attacker has to employ operational movement. Within the city, the movement is possible only at a tactical level and through synchronization. If the vertical dimension (airlift) is the best way to move troops quickly and in surprise to realize isolation, during the assault and clearance phases, the helicopters become a critical vulnerability for movement. At the ground dimension, the employment of armored forces can be possible only in combination with light infantry.

[35] Everman, Op.Cit., p.9.

Tactical maneuver can have operational consequences because it can reduce casualties and achieve some of the operational objectives. At the same time, tactical and operational maneuver can obtain strategic surprise. The effect of tactical maneuver at the operational and strategic levels can be obtained only through flexible conventional force structure and training.

Firepower is the second important function in MOUT. In an urban environment the combination of tactical maneuver with operational fire is the most important condition for victory. The operational fire in the battle for a city is the fire preparation called lethality and can have the duration of hours to months (Kosovo – 78 days). Fire preparation requires artillery, aviation, and naval fire and assures urban warfare with an unprecedented level of lethality. To assure crowd control and to minimize collateral damage in certain situations, urban warfare has to increase the precision of lethal fire and to possess non-lethal weapons. Precision engagement and the high level of collateral damage are the reasons why many consider air force and navy assets not applicable or suitable to the urban environment. The new procurement of munitions systems will increase the desired effect on the target, conform to the laws of war (proportionality), and to the current ROE. They are: Tomahawk mobile target attack capability (TOM TAC) cruise missile, for Navy; joint direct attack munitions (JDAM – a GPS guided MK-83/84 bomb with either a conventional blast-fragmentation warhead or a deep penetration warhead) and joint standoff weapon (JSOW - a JDAM GPS guided system) for Air Force; Hellfire and Tow with joint advanced weapon system (JAWS) for rotary wings.[36]

The flexibility of employing non-lethal fires is a requirement for commanders at

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[36] Everman, Op.Cit., p.13-14.

all levels, particularly at the low end of the spectrum of conflict in urban areas where collateral damage and non-combatant casualties are unacceptable. Non-lethal weapons (NLW) that can be used during urban warfare is the following: electronic warfare (EW), psychological operations (PSYOPS), acoustic signals, microwaves, sticky and slippery foams, lasers, optical (flash), chemicals, radio frequency (EMP), and entanglements.

The last important function is *logistics.* Logistics within an urban confrontation comprises survivability and sustainability. Each one is very important for urban environment because of the necessity for establishing an initial logistic plan to support a sustained urban fight and the relatively small numbers of soldiers that will be available to the operational commander for urban operations. Survivability is attained by individual uniforms, medical facilities, and avoiding fratricide. Uniforms must be light, non-bulky, and offer protection from bullets, chemical-biological agents, cold, and heat; it must also offer low signature and "chameleon" camouflage. Medical facilities need to produce immunizations that will protect against diseases often associated with urban squalor, antidotes that eliminate the threat posed by a wide variety of chemical-biological agents, and robotic aerial and ground medical evacuation of wounded soldiers. Fratricide is avoided by a friend-or-foe individual identification system (for friends, the enemy, and non-combatants) and "smart" munitions. Sustainability can be increased through: lighter and more concentrated rations (enabling a soldier to subsist for at least a weak); individual water purification; lightweight, long-duration, and high-energy power sources: and logistical distribution systems (UAVs and precision cargo airdrop system).[37]

An important operational logistic planning lesson is that both "wall busting" and

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[37] Hahn II, Op.Cit., p.6.

non-lethal munitions must be available to tactical units. The supply and evacuation

logistic systems are very important at small level units within a city. Because of difficult

airlift, the establishment of forward base of supply is a pre-condition for small units to

resist in urban areas. Trucks are not useful in an urban fight. The weather conditions can

multiply the need for material and the difficulty in delivering that material. The city itself

multiplies ten times the normal combat rate for ammunition experienced during rural

fighting.[38] The breakdown in logistic supply can happen suddenly and often. Within a

city it is necessary to include in the logistic plan, the quartering of civilian population and

non-combatant refugees.

Chapter 3

The Application of International Law on Urban Areas

> *"After troops have crossed the borders, responsibility*
> *for laws and orders devolves upon the generals."*
> Sun Tzu[39]

Although the selection of targets and weapons, attack headings, and strict ROE

govern the general conduct of MOUT, numerous instances of collateral damage

inevitably occur in urban areas. Some of these involve civilians and their warehouses,

cultural buildings, industrial and communications facilities situated in cities. But

unnecessary suffering and collateral damage are subject to the protection of international

law.   Commanders and their staff have the added difficulty of taking into consideration

aspects of international law when they plan an operation in an urban environment.

The Hague Convention was insufficient to prevent the horrible experience of

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[38] Cooling, Op.Cit., p.45.
[39] Sun Tzu, Op.Cit., p.64.

civilian population during World War II. Excessive suffering had to be

stigmatized, punished, and prevented. The post-war series of war-crimes trials had

already, by mid-1949, administered punishment to some guilty individuals and groups

(e.g. the German S.D. and S.S.). But to prevent the breaking of law and to increase its

influence necessitated the appearance of new rules – Geneva Conventions, 1949.

Because of the disputes between allies regarding civilians and combatants, additional

protocols to Geneva Conventions were signed in 1977. The debate among politicians and

military leaders about the influence of international law upon military operations in

general is not completed. To begin with, the definition of "civilians" is yet unclear.

Some military leaders claim there are no civilians to protect because the distinction

between civilians and combatants cannot be maintained in modern, industrial societies.

Others claim there are combatants who better deserve protection than some so-called

civilians. All can agree that the nature of war is such that even civilians who

undoubtedly deserve protection cannot, in fact be guaranteed it (see Appendix D for a

listing of relevant international law documents and treaties). All these treaties are one

source of international law. The other two sources are military manuals and writings of

qualified legal scholars and jurists.

Respect for civil properties within cities requires constant reference to

international law but the international community has to look to other areas for resolution

of the problems posed by the possession and proliferation of WMD. Arms

control and disarmament became a separate area of conferences, agreements and treaties.

Resolutions about strategic arms reduction, mutual balanced force reduction, verification,

or confidence building were passed in international organizations, changing and

expanding the goals of international law.

The purpose of international law in an urban area is protection of non-combatants from unnecessary suffering and of vital properties (particularly medical and religious places, historical monuments, and cultural tradition places) from collateral damages. In addition, international law safeguards certain fundamental human rights of civilians living in cities who fall into the enemy's hands, and facilitates the restoration of peace. Jean Pichet defined the principle of this law in 1985, as "belligerents shall not inflict harm on their adversaries out of proportion with the object of warfare, which is to destroy or weaken the military strength of the enemy."[40] The law of war about "proportionality" is applicable to MOUT though may be difficult to uphold given the constraints of terrain. The law means the military should restrict the amount of force used to accomplish the mission. For example, the use of artillery and aviation against insurgents, who have only light armament is not allowed. Yet this law was violated in Grozny.

Protection of Civilians

What is a civilian, or non-combatant? The first unbridgeable conceptual distinction between non-combatants and combatants was made by Rousseau in the 1760s, when he described non-combatant as a person who formed no part of an enemy country's armed strength and made no contribution to it. His assertion was developed a hundred years later during the St Petersburg Declaration's restrictive definition, when the non-combatant was seen as an enemy person not dressed in a markedly military way and not enlisted in a designated military organization.[41]

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[40] Best, Geoffrey *"War & Law since 1945"* Clarendon Press, 1994, p.271.
[41] Ibid, p.258.

The Geneva Conventions define non-combatants as civilian persons, who take no part in hostilities, and who, while they reside in the conflict or neutral zones, perform no work of a military character. Everybody who is not a combatant is declared to be civilian; in case of doubt, the latter protected status is generally to be assumed. In popular terms, the distinction between combatant and non-combatant is approximated to the difference between the military and the civilian population.[42] Obviously with modern industrial warfare such a distinction is difficult to maintain because workers in defense plant do contribute to war effort in a real way.

There are three categories of civilians, which are subject under the protection of international law. The first category includes civilians residing or traveling in a foreign country at the time the host country becomes a formal enemy of their own state. A second category is those civilians of a country subjected to military occupation. The last category of civilians are those of belligerent states suffering as a result of enemy attacks, whether directly aimed at them or incidentally hitting them, as happens during aerial bombardment.[43]

The debate over which category of civilian population can be subject under international law, or if entire civilian population must be subject, is a long and unfinished controversy between politicians and military leaders. Difficulties and complications have crowded in upon this debate, as already noted. Mass enthusiasm for particular wars and the accompanying difficulty of reckoning how much of war is spontaneous or contrived add to this debate. The mobilization of whole societies and economies for war and industrialization of warfare, which make it necessary, increase the importance of the

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[42] F.M.27-10, Chapter 5 Civilian Persons, http://155.217.58.58/cgi-bin/atdl.dll/fm/27-10/Ch5.htm, p.4.
[43] Ibid, p.115.

result of this debate. If the tendency of the law and the aspirations of the parties are to

maximize the protection for non-combatants, the war's new weapons of mass destruction

and means of delivering them undermine that protection. In other words, the technology

of war is working at cross-purposes to law. International law does not differentiate

among the civilian population, but decision-makers attempt to with the following

categories:

a. "Innocent", or utterly non-threatening: infants, disabled, elderly in all

circumstances; and women, children, and old folks in exceptional circumstances.

b. "Quasi-civilians", or adults who share in the political and psychological

encouragement and support of war: civilians involved in the invention, manufacture, and

distribution of all the material staff necessary to the conduct of hostilities; civilians

involved in the maintenance of all the plant necessary to the functioning of modern

organizations; and civilians who wish or were instructed to offer resistance to enemy's

military occupation.

c. "Revolutionary fighters", or some categories of civilians who support

them: peasants, workers, merchants; landowners, bankers, and shopkeepers; public

officials like mayors and headmen, priests and teachers; and mass-media employees.[44]

d. Civilian leadership, which are formally regarded as non-combatants, and

might not be a legitimate object of attack alone under the international law; they would

be subject to attack if co-located with military leadership.

As difficult as it is to define civilians it is even more difficult to protect them.

One of the four 1949 Geneva Conventions was related to the protection of civilians

in time of war. There are two principles in this convention. First, parties shall at

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[44] Best, Op.Cit., p.257, 259, 265.

all time distinguish between the civilian population and combatants, and shall direct their operations only against military objectives. The second principle obliges parties, to the extent possible, to remove civilians and civilian objects from the vicinity of military objective (no "human shields").

Unnecessary suffering and civilian casualties are two concepts, which are recognized in the protection of civilians. Unnecessary suffering was first stipulated in article 23e, HR IV (1907) and obliges commanders in planning and conducting operations to not use means and methods "calculated to cause suffering and death which is not necessary to achieve their legitimate objective."[45] To conquer a city does not mean to destroy the entire urban area. To defeat an insurgency or a revolution does not mean to kill all civilians who support it. Yet, in practice such restraint can be difficult to maintain.

Unnecessary civilian casualties are regarded in the Geneva Convention as genocide. Genocide means to kill the members of a group, to cause serious bodily or mental harm to these members, or to deliberately inflict on the group conditions of life calculated to bring about its physical destruction in whole or in part, or to impose measures intended to prevent births within it, and to forcibly transfer children of the group to another group. The scope of genocide is to destroy, in whole or in part, a national, ethnic, racial, or religious group. Genocide after World War II includes the extermination perpetrated by the Khmer Rouge in the 1970s, and continue with the fighting and famine in Ethiopia in the 1980s, and culminated with the 1990s civil war in Somalia, where competing ethnic groups purposely starved members of rival ethnic

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[45] Lt.col.Maguire , Robert R., USMC, *"Laws of War",* a power point presentation at MCU CSC, September 22,2000.

groups, and the ethnic clashes in the Balkans. The Geneva Conventions are not sufficient

in themselves to eliminate the problem. A report by Helsinki Watch, a non-governmental

human rights organization, gathers evidence about the Balkans abuses:

> The 'ethnic cleansing' that is being practiced by Serbian forces is
> directed particularly against Muslims and Croats on the basis of their
> religion and ethnicity. The victims of such 'ethnic cleansing' have been
> expelled from their homes and villages; rounded up and held in detention
> camps; deported; killed in indiscriminate attacks; and summarily executed…
> To varying degrees, all parties to the conflict in Bosnia-Hercegovina have
> violated humanitarian law, or the laws of war. Croatian and Muslim forces
> have taken hostages, mistreated persons in their custody and harassed
> Serbs in areas which they control. Serbian forces have committed the
> same abuses but on a broader scale. Helsinki Watch has found that Serbian
> forces are summarily executing, detaining, and deporting non-Serbs in
> areas under their control in an effort to 'ethnically cleanse' such areas of
> Muslims and Croats. Such practice were employed in Serbian-occupied
> areas of Croatia. Similarly, Serbian paramilitary groups are responsible
> for the forcible displacement of Hungarians, Croats, Ruthenians and others
> living in Serbia, particularly in the province of Vojvodina.[46]

The urban environment generates combat conditions where it is harder to observe

international law. The growth of population in cities that do not have service

infrastructure and the existence of the periphery make not only the domestic laws

difficult to respect, but international law too. Decision-makers often do not respect,

deliberately or not, civilians' life.   They do not evacuate civilian population from the city

and they use buildings in which civilians live for military purposes. Their decisions can

lead to unnecessary suffering and civilian casualties.

What deliberate acts lead to unnecessary suffering and civilian casualties

during MOUT? There are five categories of such acts:

a. *Deportation.* The occupier may not forcibly transfer or deport civilians,

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[46] Reisman, Michael W., and Antoniou, Chris T.   *"The Laws of War: a comprehensive collection of
primary documents on international laws governing armed conflict."* A Division of Random House, Inc.-
New York, 1994, p.84-86.

either individually or *en masse* from occupied cities to his own or any other territory, except, temporarily, when the situation demands (e.g. when civilian population are evacuated from an operational urban area before conflict begin). Once hostilities in the area in question have ceased, the occupier is obligated to transfer the civilian population back into their city-homes.[47]

b. *Starvation*. Starvation of civilians as a method of warfare is prohibited. This prohibition is related to protection of objects indispensable to the survival of the civilian population in a city, such as: foodstuffs, agricultural areas for the production of foodstuffs, crops, livestock, drinking-water installations, supplies and irrigation works. Starvation of civilians can occur during military and non-military offensive operations in an urban environment, such as sieges, blockades, embargos, and other war-induce hardships.

c. *Terror.* In the Geneva Convention all measures of intimidation or of terror are prohibited. But government and armed forces deliberately spread terror among their own civilian population or other people under their power. Such acts include: assassinations, "disappearances", kidnappings, bombings, rapes, tortures, corporal punishment, intimidations, coercion, collective penalties, reprisals, and pillage. Some of these are more the specialty of counter-insurgent operations or insurgent and revolutionary operations with the common purpose of terrorizing civilians to support these operations within cities.

d. *Strategic bombardment*. This is the dramatic modern war-practice of belligerents with an attractive new weapon where science and technology outpace law

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[47] Best, Op.Cit., p.120.

and ethics. The "area" or "carpet" bombing in populated areas was a new practice

introduced in Iraq and Kosovo. But HR IV prohibits bombardment, by whatever means,

of towns, villages, dwellings, or buildings that are undefended. Before commencing a

bombardment, a commander must do everything in his power to warn the authorities.

e. *Employment of arms causing unnecessary injury*. The law forbids the use of

arms, projectiles, or material calculated to cause unnecessary suffering, such as: lances

with barbed heads, irregular-shaped bullets, projectiles filled with glass, any substance on

bullets that would tend unnecessarily to inflame a wound inflicted by them, and the

scoring of the surface or the filing of the ends of the hard cases of bullets. Weapons of

mass destruction (WMD), weapons employing fire, and poison are prohibited too. A

final category of arms causing unnecessary injury, which was prohibited in 1999, is anti-

personnel mines.

What measures are there at the disposal of the operational commander, to protect

civilian population in his area of responsibility? Evacuation of non-combatants from

defended places in advance is one of the oldest protective measures used. Unless

circumstances do not permit, the attacker must give an effective advance warning of

attacks that may affect the civilian population. A recent one is the formation of well-

marked demilitarized or "neutral" zones and civilian reservations, to which civilians can

be moved by belligerent parties' agreement. In protection of civilian population, neutral

states and impartial humanitarian organizations (International Committee of Red Cross,

Red Crescent, etc.) can be used. But the most important measure is to know the

international law articles and to respect them.

The casualties of armed conflicts, when estimates of them are made, normally

place people first and property second. Civilian protection has become the most widely perceived end of the international law. This protection is transposed in ROE, the guidance and restraint of combatants as to what they may and what they may not do. ROE issues can adversely affect a mission if they are not addressed in the planning and training process. But ROE are useful tools for operational commanders because their use may assure the legitimacy of the operation.

Protection of Properties

The process of targeting and attacking the civil and military-related infrastructure in cities includes a number of measures to avoid "collateral damage". Selection of targets and weapons, attack headings, and strict ROE, should govern the general conduct of MOUT. In choosing means and methods of attack, international law requires incidental loss, injury and damage to civilians and civilian objectives be minimized. No attack should be launched where the anticipated civilian losses would be excessive in relation to the concrete and direct military advantage anticipated. But when civilian objectives are positioned near military objectives, it is difficult to discern the difference.

In HR and the Additional Protocols there are three categories of civilian property under the international law's protection.

a. *Medical and religious facilities.* These are hospitals, churches, and safety zones or localities so organized as to protect the wounded, sick and aged persons, children under fifteen, expectant-mothers and mothers of children under seven, medical and religious personnel. Civilian medical and religious facilities organized in such manner, may in no circumstances be the object of attack, but shall at all time be respected and protected by the belligerents. To be recognized as protected property, they have to

show a distinctive emblem (Appendix C) and obtain a certificate to show that they are civilian medical and religious facilities and that the buildings, which they occupy, are not used for any other unprotected purposes.[48]

b. *Cultural property.* Cultural property contains movable or immovable property of great importance to the cultural heritage of the people, such as: monuments of architecture, art or history, whether religious or secular; archaeological sites; groups of buildings which, as a whole, are of historical or artistic interest, or preserve or exhibit this interest (museums, large libraries and depositories of archives, and refuges intended to shelter this interest); works of art; manuscripts, books and other objects of artistic, historical or archaeological interest; scientific and important collections of books or archives or of reproductions of these; and centers containing a large amount of cultural property, known as "centers containing monuments". To be under the protection of the law, each cultural site must be identified through the diplomatic channel, must contain a zone of protection and an outer zone (not exceeding 500 meters in width, measured from the circumference of the said area) and must be visibly marked (Appendix C.[49]

c. *Installation with "Dangerous Elements".* All nuclear research reactors, chemical weapons facilities and industrial chemical factories, biological weapons factories, pharmaceutical factories, dams, dykes, and storage sites, can be interpreted as containing "dangerous element" and thus the attack of them may be restricted under AP, the Geneva-based Nuclear Non-Proliferation Treaty (NPT) or the International Atomic Energy Agency (IAEA) Convention, if such attacks are likely to produce "severe losses

[48] F.M.27-10. p.5.
[49] Reisman, Op.Cit., p.97.

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among the civilian population."[50]

The law requires that all necessary steps be taken in sieges and bombardments to spare, as much as possible, buildings dedicated to religion, art, science or charitable purposes, historic monuments, hospitals, and places were the sick and wounded are collected.[51] Such buildings, objects and places must by day be indicated by visible marks (see Appendix E). If a determined defender in urban area chooses, he can lure the aggressor to attack these protected places. Although the defender may be charged as a war criminal judged by the International Court of Justice, he may also undermine public support for the attacker.

According to the law, all enemy public movable property, other than that under general and special protection, captured or found on a battlefield becomes the property of the capturing state. Enemy private movable property, other than arms, military papers, horses, and the like captured or found on a battlefield, may be appropriated only to the extent that such taking is permissible in occupied areas. Laws forbid the devastation, destruction or seizure of the enemy's property, unless these are necessitated by war. Buildings may be destroyed for sanitary purposes or used for the shelter for troops, the wounded and sick, vehicles, and for reconnaissance, cover, or defense. Fences, woods, crops, buildings, etc., may be demolished, cut down, and removed to clear a field of fire, to clear the ground for landing fields, or to furnish building materials or fuel if needed for the armed forces. Thus the rule requiring respect for private property is not violated through damage resulting through operations, movements, or combat activity of the

[50] Arkin, William M., Durrant, Damian, and Cherni, Marianne *"On impact: modern warfare and the environment: a case study of the Gulf War."* Washington D.C.: Green peace, 1991, p.126.

[51] Reisman, Op.Cit., p.94.

belligerents.

Public and private property, other than medical and cultural facilities, cultural property and installations containing "dangerous force", which are under general or special protection of the law, are not to be destroyed or seized, unless a military necessity. This rule is by definition violated by "strategic bombardment", which allows commanders to use the effectiveness of B-52 bombing as a psychological weapon in populated areas. Colonel Heys Parks, USMC (Ret) sees strategic bombardment as lawful. Romanian law specialists disagree with the view, claiming that any bombardment treats a number of clearly separated and distinct military objectives located within a city as a single objective.

There remains a clear distinction in MOUT between military necessity and unnecessary suffering and collateral damage. Military necessity authorizes only such destruction, as is necessary, relevant and proportionate to the prompt realization of legitimate military objectives. Unnecessary suffering and collateral damage in urban area means violence above that which is necessary for the overpowering of the opponent.

Chapter 4

Romanian Revolution, December 1989 – a Case Study

> *"A people's insurrection and a people's*
> *revolution are not only natural but inevitable."*
> V.I.Lenin, "People and Revolution."

The Romanian Revolution demonstrates the tendency for urban operations to cause the levels of war to blend. In this revolution the operational level becomes very "thin". Tactical employment of small light units could achieve the strategic level objectives. Thus, without strategic and tactical detail, it would be difficult to list

operational lessons learned from this revolution that specifically pertain to urban conflict.

The Romanian Revolution is a valuable case study because it offers tangible evidence of the contributing role urban areas have on the use of force and how those conditions exacerbates the difficulty of applying international law concerning non-combatants. To "think outside the box" in this case presumably would counter the traditional approach to those issues that affect mission accomplishment. It is natural, of course, in a time of great revolutionary change to search for a "Philosopher's Stone", or to look for the sword that can, in one clear stroke, unravel the intricate Gordian knot of the effect of international law upon MOUT in a time of revolution. The Romanian Armed Forces restraint in using deadly forces against the civilian population and the military support of the popular revolt were the main important reasons for the success of the revolution.

When the aim of a revolution is limited, the urban areas are usually not the means, but the end. Cities will rank as small, independent conquests, and as such will have the following advantages: they have precisely defined boundaries; posses popular support for revolutionary forces; serve as useful bargaining chips at the peace table.

The word "revolution" can be applied only to those changes that have freedom as an aim. A revolution is a radical change that ends a political structure and replaces it with a new one based upon freedom and human rights. A revolution is, moreover, a choice of a political or social class or a minority. Also a revolution can be the avenue of an oppressed people against its oppressor government or leader. Such was the case of the Romanian Revolution in December 1989. The oppressed people revolted against

many "dark" decades of communist oppression and dictatorship under Nicolae Cheuchescu. The people used urban terrain and international law to its advantage during revolution. The Government ignored the advantages of urban terrain and violated international law. The causes of this revolution were the lack of information and freedom, starvation and poverty.[52]

Violence is not a sine-qua-non element of a revolution. Revolutionary changes are not always violent; however when a crowd is involved in a revolution, violence usually occurs (i.e. French Revolution and Russian Revolution). In the case of the Romanian Revolution, violence was at the highest level of all former communist European countries, because of the communist dictatorship in Romania and the people's hatred against the ruling class.

Strategic Setting

The period immediately before the Romanian Revolution (1985 – 1989) was a period of profound change in the Union of Soviet Socialist Republics (USSR) and all communist countries. After the death of Konstantin Cernenko on March 10, 1985, Mikhail Gorbachev took the leadership in the communist world . His new ideas and concepts, such as *glasnost* and *perestroika,* opened the way for social-democracy way in USSR. A controlled market economy, the de-nationalization of state property, agricultural and financial reform, were just some of his ideas about social democracy. His changes applied not only to the domestic structure of the USSR but also in the entire communist world, especially in the six European countries (East Germany, Poland, Czechoslovakia, Hungary, Romania, and Bulgaria).

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[52] Jablonsky, Op.Cit., p.47. As the revolution in Central and Eastern Europe demonstrated in the fall of 1989, a new fact of life in the international arena is that it is not longer possible for any nation-state to deny its citizens knowledge of what is taking place elsewhere.

The "Gorbachev Effect" created a storm among the Soviet satellite countries in Europe. Like a domino effect, all communist leaders were removed from their ruling positions, throughout the year 1989. All these "cabinet revolutions" took place in urban areas, almost in the capitals, without violence (except Romanian Revolution), and with respect to international law.

The domestic situation in the Socialist Republic of Romania (SRR) was not affected by social democratic changes, but continued in oppression and poverty. Romania's dictator, Nicolae Cheauchescu, became an old and invalid leader. He suffered from diabetes, prostate's cancer, and neural affection (Broca's aphasia – from June 1988). These sicknesses affected his mental capacity and led to character flaws such as excessive pride, distrust, false judgment, and aggressive reactions[53].

Oppression and poverty led to some primary reactions in urban areas from a discontented people. At Brasov, a great industrial center, the local communist administrators could not be elected in 1987, because the workers from two big factories boycotted the ballot boxes. The strikes at Turda, Cjuj-Napoca, Timisoara, and Arad showed growing dissatisfaction. And among all these reactions, a large number of refugees crossed the boundaries into Hungary and Yugoslavia.

Assessing the Intervention Plan

Domestic conflict in Romania's principal cities was amplified by the international conflict between Gorbachev and Cheachescu. Some articles from the media (e.g. the articles published in January and February 1990 in "Europe Magazine", from Bruxelles), showed Gorbachev's role in the Romanian Revolution and

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[53] Accoce, Pierre, and Dr.Rentchnick, Pierre, *"The Invalids who Lead Us"*, Z-2000 Publishing House, Bucharest, 2000, p.175-191.

in the execution of Cheachescus. After the Gorbachev – Bush meeting at Malta (the beginning of December, 1989), professional people from the G.R.U. (Soviet Military Intelligence), were prepared to start a revolution in Romania's principal cities. Their role was only as a spark to start the revolutionary fire, already existent in cities. The strategic objective was to overthrow Ceauchescu. The operational objectives were the Communist Party buildings in Romania's principal cities.

Romanian political dissidents assumed the operational command of the theater. They identified Bucharest City (the capital) as the strategic center of gravity for Ceauchescu – the primary source of his strength and power. Moreover, the political dissidents identified the gap between the Romanian Armed Forces and Security as one of the critical vulnerabilities at the operational level. Other critical vulnerabilities were the close military- civilians relations, and the poor training, organization and equipment for military units fighting in urban areas. The dissidents believed that by removing Ceauchescu (considered a relatively difficult task), they could readily put an end to poverty. As an extension of this reasoning, they viewed the Romanian principal cities (Timisoara, Cluj-Napoca, Sibiu, Craiova, Constanta, and others) and international public opinion, as decisive points. Thus, Timisoara became the initial operational objective.

After the invasion of Czechoslovakia in 1968, the Warsaw Pact made some plans to intervene in those countries that posed problems for the U.S.S.R. For Romania, this plan was called POLARKA. It comprised three phases: an air phase (fig.12), a maritime phase (fig.13), and a joint phase (fig.14). The intervention in Romania would take place from west and east.[54]

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[54]_____. *"Military Observer",* a Romanian Military Newspaper, December 21-27, 1994, p.18.

Hungary intensively acts on different way… to destabilize domestic
political situation in our country, especially for Transylvania…
Simultaneously with the provocation of a Hungarian minority
population demonstration in Transylvania, Hungary intends to
provoke some minor border incidents to generate in an armed
conflict between the two countries, and then to solicit the intervention
of Warsaw Pact and USSR.[55]

One of the variants to overthrow the Cheauchescu regime was made at Iasi City, a

city situated near the border of the USSR, on December 14,1989. In this area since

November 1989 was a small dissident intellectual group, which constituted the Romanian

Popular Front. They tried to capture a large group of students in an early revolt, but were

thwarted by Security. The Iasi City revolt was a lesson learned and a rehearsal for the

real revolution. At the same time, Iasi City provided a deception plan.

The real plan comprised Timisoara as the first city to start the revolt. Why

Timisoara? At that time, Timisoara was a kind of European multicultural city, opened to

a market economy, especially from outside the borders (Yugoslavia and Hungary). In the

city existed a strong reformist religious group, led by Tokes Lazlo. Hungarian authorities

interested in religious freedom supported this group. Hungarian authorities, in

accordance with some Occidental authorities (Austria, Germany, etc.), tried to influence

Romania to grant autonomy to Transylvania. Timisoara was situated too far from

Bucharest and thus, an intervention were difficult and would take long time.
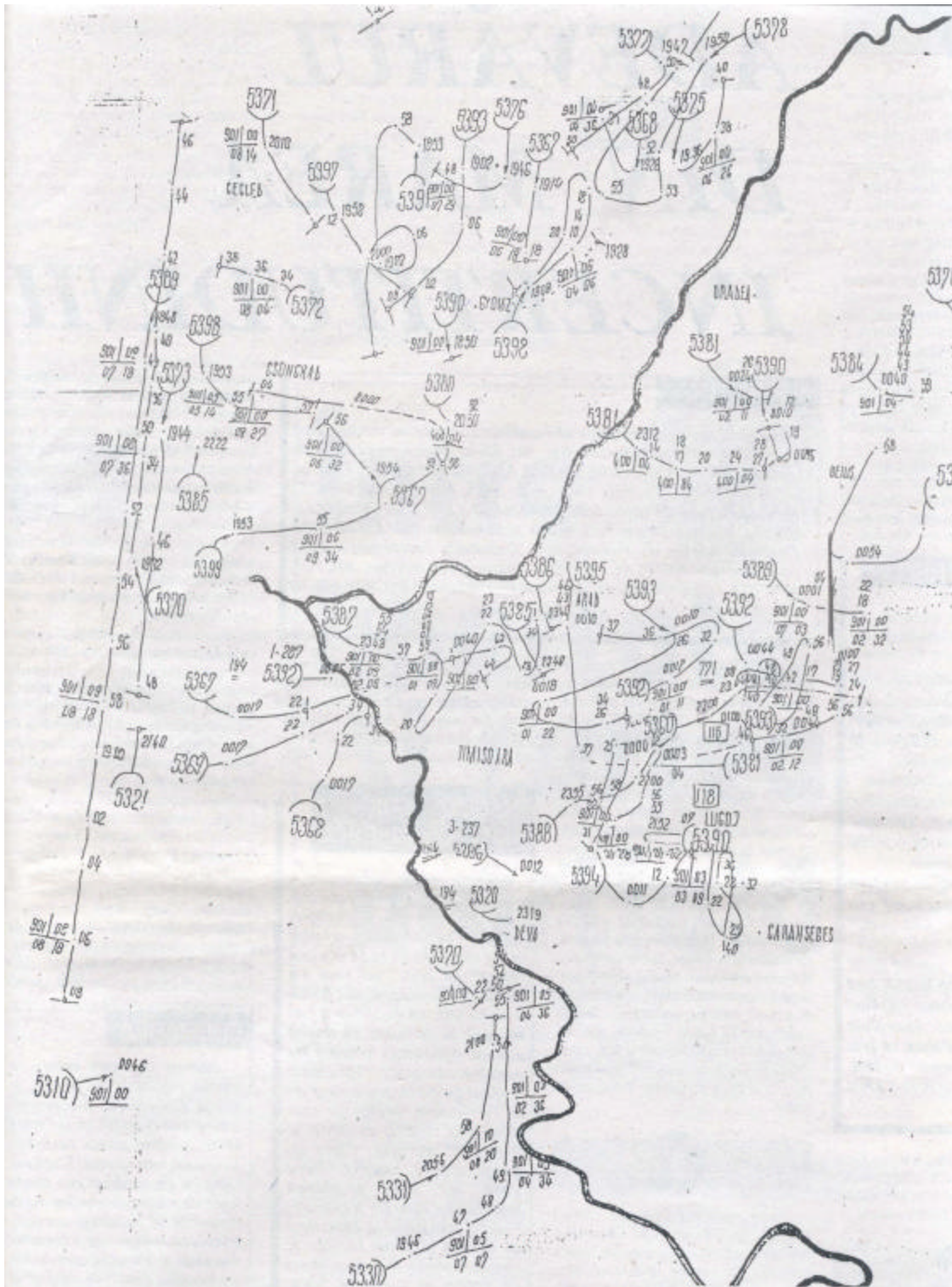
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[55]Sava, p.28.

Figure 12. The Air Campaign against Romania (Phase I).[56]

[56]_____"Military Observer", a Romanian Military Newspaper, December 21-27, 1994, p.14.
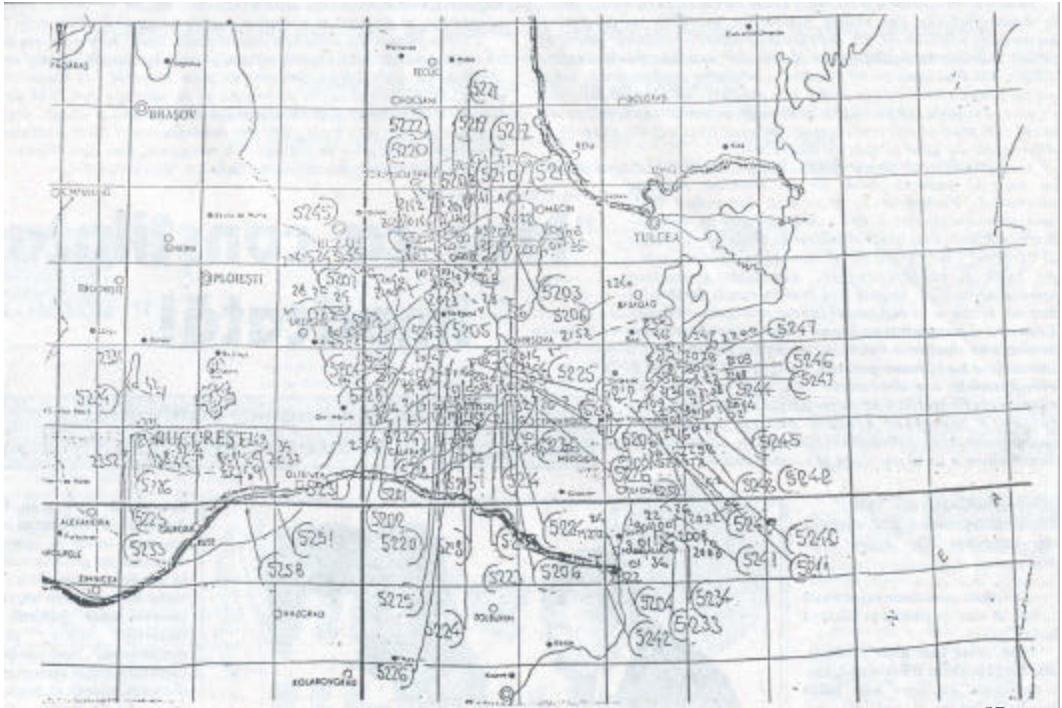
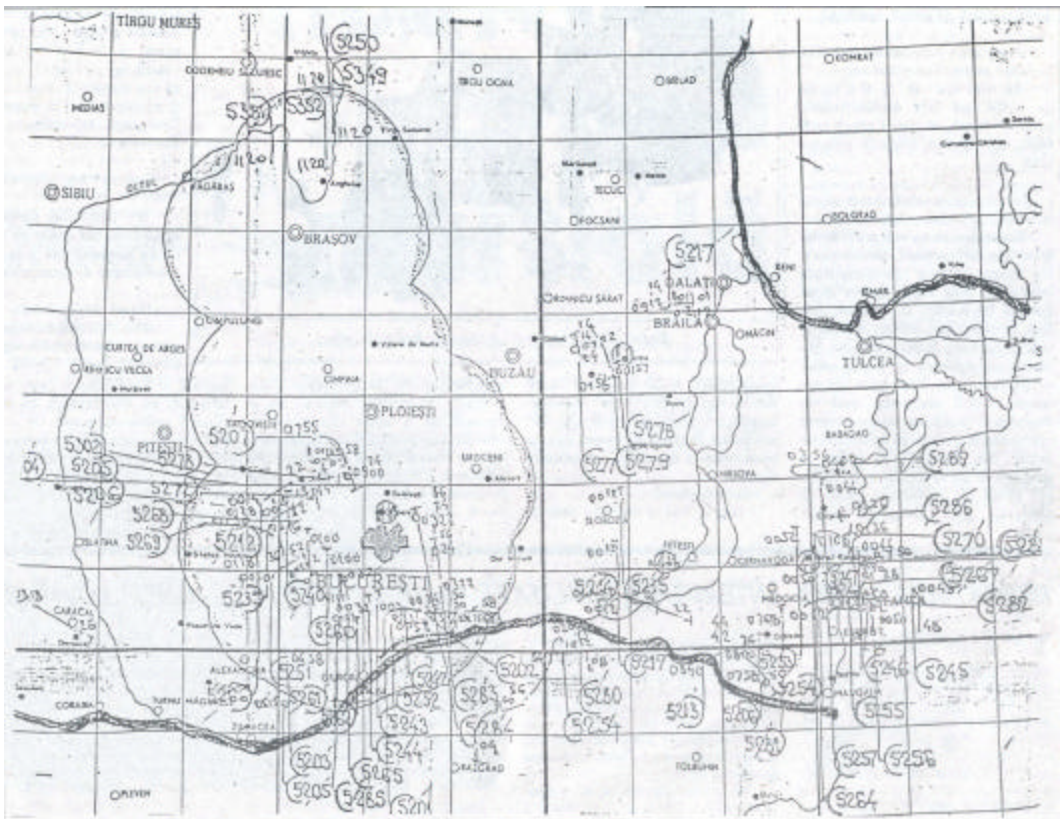Figure 13. The Maritime Campaign against Romania (Phase II).[57]

Figure 14. The Joint Campaign against Romania (Phase III).

[57] Ibid, p.15.

International media, especially American "Freedom Europe" and "Voice of America", and British "BBC" radio stations, played a special role in Romanian Revolution. They began a vigilant campaign against Cheachescu, carefully observing psychological and moral influence of Romanians living in cities. Through vehement criticism of Cheachescu policy, these radio stations tried to create a hostile mood against the communist regime, to encourage dissidents and to incite a revolt within cities. Hungarian T.V. and radio stations amplified the magnitude of these purposes.[58]

At the beginning of December, the CIA set up an organization called "Trust Organization", whose purpose was to encourage and support dissident movement in Eastern Europe, and destabilize the communist regimes in these countries. One of its targets was Romania. On November 29, 1989, President Bush changed the American Ambassador in Romania, sending his friend Alan Green. Meanwhile, NATO countries increased their embargo against those countries that did not implement democratic reform.

Assessing the Communist Plan

There is some debate over whether or not Ceauchescu had a formal counter-insurgency plan at the outset of the revolution. It would be difficult to believe, however, that he did not at least outline a general political-military protection plan given the military leadership backgrounds of both Vasile Milea and his Chief of Staff, Stefan Guse. Ceauchescu did not believe that revolt was the people's will. Rather, he believed that

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[58] Sava, Constantin, and Monac, Constantin *"Truth about December 1989: Conspiracy, Diversion, Revolution – Documents from the Armed Forces' Archive"*, Forum Publishing House, Bucharest, 1999, p.9-27.

some reactionary hostile forces from outside the borders incited the population to revolt.
For this reason, his entire protection plan was based on the destroying only those
reactionary forces. Therefore, the communists assumed that the reactionary forces'
operational center of gravity was the external support. They believed that these forces
were not under the umbrella of international law and could be subjected to deadly fire.
They considered the extermination of these forces a relatively easy task.

The military forces had been called on to assist in a few operations with local law
enforcement agencies responding to civil disturbances. How the military was to
respond and with what degree of success are the key questions resulting from the
Romanian Revolution. In cooperation with Ministry of Interior forces and Guard
Reserve the Army was used to help guard the political-administrative buildings, and to
quell riots and demonstrations stemming from the political and civil rights movement.
The Air Force and the Navy was used to control the air and maritime national space and
to deny any foreign intervention. Generally speaking, the Romanian Armed Forces were
not prepared for urban revolutionary guerilla warfare in the following areas: equipment;
organization; training; experience and lessons learned from previous operations in urban
areas; and leadership.

Revolution Execution

Just before the beginning of the revolution (December 16), the number of tourists
who transited Timisoara increased considerably. The Security reports stated that massive
tourist groups of 20-30 cars came into Romania from Yugoslavia and Hungary. They
were former refugees who, after a trained period of time, returned to Romania to conduct
diversionary operations. At the same time, in the eastern part of Romania, small groups

of young and athletic tourists (two-three people in a car) came from USSR. Their destination was Bucharest.

The real revolution began on December 16, 1989, when the Timisoara people met to declare solidary with the protestant pastor, Laszlo Tokes who was evacuated from his parochial house. As a familiar professional revolutionary scenario, the street demonstrations increased in three days, from a few students meeting to a young people and young workers uprising, and culminating with a street fight between constabulatory forces and the population. The revolt supported by provocateurs and diversionists, was elevated to a popular revolt.

At that time Cheachescu was out of the country in Iran. The moment the revolution started was very well selected, because he was the Supreme Commander of the Armed Forces and could not directly interfere with the demonstration. When he returned from Teheran, on December 20, 1989, Cheachescu tried to manipulate domestic and international public opinion by denouncing this demonstration as an "anti-national and fascist group action against Romanian vital interests"[59]. He ordered the Armed Forces and the Security to intervene and stop this revolt, using deadly force if necessary. But at the same time of this combat alarm and the declaration of necessity order, he made a series of mistakes. Cheauchescu did not interdict night traffic and movement. The rail stations, crossroads, and common transportation were not blocked. These mistakes led to new demonstrations in the capital of the country, Bucharest City. His intention to find a guilty person for all these manifestations ended with the Ministry of National Defense suicide, four-star general Vasile Milea. By denouncing Vasile Milea as a traitor who organized this revolt, the Armed Forces turned their back on Cheachescu and joined the

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[59] _____. *"The People's Spark",* a Romanian Daily Newspaper, December 24, 198, p.4..

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revolt.

The demonstrations started in all big Romanian cities: Cluj-Napoca, Oradea, Brasov, Sibiu, Buzau, Iasi, and Constanta. In two days, the Cheauchescu regime disintegrated. He and his wife tried to evacuate via helicopter, but were caught, tried and killed, on December 25,1989.

At the same time of Cheauchescu's attempted escape, three "dissident persons", selected by Moscow to replace him, were helped by "professionals" to occupy T.V.and Radio central stations (occupation of the media is vital for a revolution in an urban environment). These dissident persons were Ion Iliescu, a Gorbachev friend and future Romanian President, Nicolae Militaru, a G.R.U. agent and future Ministry of National Defense, and Petre Roman, the Jewish son of a Spanish War veteran (one of the Romanian Communist Party's fathers), and a future Prime Minister. They organized the National Rescue Front and took over the Romanian leadership.[60]

Operational Level Assessment

The communist protection campaign was a strategic and operational failure. Their assessment of the loyalty of the armed forces and security, and the people's will led them to many political mistakes. Respect for international law by the Romanian Armed Forces influenced their decision not to commit genocide and to join the popular revolt. This respect and the close civil-military relationship were the main sources for the revolutionary victory. The Romanian Armed Forces were not prepared to fight in cities. Fighting against terrorists was something new for military leaders.

During the time of the revolution, the Romanian Armed Forces were used for two

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[60] Ionescu, p.134-135.

different purposes. From 17 to 21 December large units from the Land Forces were used to protect principal buildings in Timisoara and Bucharest City, and to suppress civilian revolt. Beginning with the 21st of December, until the end of the year 1989, all Armed Forces branches were used to support civilian revolt and to deny any outside intervention.

The suppression of civilians was not a type of mission for military operations on urbanized terrain. The Land Forces units and large units did not have the adequate equipment to fight within cities and were not prepared to fight against the urban guerrilla.

The use of deadly forces against civilians was the dilemma for military leadership in this revolution. International law and ROE were not at the forefront of the senior officers attention at that time. Romania signed HR, the Geneva Conventions, and the Additional Protocols and these were incorporated into domestic laws. In military society these laws were transformed into regulation requirements, applicable during peacetime and crisis situations. These requirements included prohibitions against the deadly use of force against teenagers, women, and old persons and against the use of deadly force against children, pregnant women, and when it is perilous for the life of other persons.

Nothing in these requirements negated a commander's right and obligation to take all necessary and appropriate action for his unit's self-defense. But, at the same time, one of the missions of the Romanian Armed Forces was to protect the people's revolutionary conquests against any international threats. At the beginning of revolution it was thought that foreign agents and spy agencies, who wanted to destroy the communist ideals, started and supported the people revolt in Timisoara. That assessment led to the right of the military personnel to use deadly force in self-defense, their units defense and defense of buildings under protection against any hostile act. In the midst of crowds

there were some 300-400 revolutionary professionals trained by foreign countries (USSR, Hungary, NATO countries) to increase the popular revolt. If the civilians used rocks, "Molotov cocktail" (incendiary bottles), chains, and metallic balls to seize administrative and political buildings, these professionals handled white and fire armament. Due to their actions, soldiers were killed and soldiers opened fire against civilians.

The order to use deadly fire was given by Nicolae Cheauchescu in the night of December 17, before his departure to Iran. The Ministry of National Defense to the Commander in Chief (CINC) of Timisoara Action Theater, three-stars general Stefan Gusa, transmitted it. In the same night, a civilian-military general headquarters (HQ) was established at Timisoara, under a civilian command, Ion Coman, the Secretary of the Romanian Communist Party and former Ministry of National Defense. Under his command were military troops, troops from Ministry of Interior, and Reserve Guard. But if at operational level there were a joint civilian-military command and control, at the tactical level this joint effort was not achieved. The military units, Ministry of Interior units and reserve guard units acted independently, within separate areas and sectors. Although there was an integration of all force structure, there was not a synchronization in their action.

The Romanian Armed Forces had no ROE during their intervention in support of the government. Each commander had to remember he was responsible for his unit and had to do all he could do to ensure that respect for international law was appropriated to the mission and threat. S-2 personnel for accurate threat, S-3 personnel to prosecute operations, and political and legal advisors did not periodically review the prescription of international law. The changes in the general situation and these prescriptions did not

immediately permit effective training under revised conditions and rules. Before

deployment, military units did not conduct in advance tactical training under the

legal requirements at the small unit level. In planning and conducting street fighting,

commanders were legally authorized to kill combatants and to use measures not

specifically forbidden by international law, which were indispensable for securing the

submission of the terrorists. How to select these terrorists from the huge mass of civilian

population and to fight against them was not the "genius" of the Romanian commanders.

Intelligence and force protection were not used at their entire capacity. No one

from the general HQs knew what would be the next objective of the urban guerrilla.

The information and orders were small and inconsequential. The soldiers fought in the

street with blind ammunition or without their armament. Heavy combat vehicles

(tanks T-34, T-55, Armored Personnel Carriers TAB 71, 77, and fire vehicles) were

deployed to block streets and entrances of some principal buildings, but without

ammunition and infantry support. These mistakes led to death and injury of many

soldiers and the arson of some combat vehicles. The crowd attacked some military units

to capture armaments and to destabilize command and control functions.

Solid intelligence networks were required to operate efficiently in the urban

revolution. Alienating the population made establishing a HUMINT organization almost

impossible for the military. Treating the population with respect and dignity as much as

possible improved intelligence-gathering capacity, as did civic action and PSYOPS

programs. Winning the people reduced terrorist infrastructures. The people are won

over by offering tangible benefits and protection not available from the terrorists.

The Romanian military forces operated in volatile urban areas against subversive

terrorists. To maximize force protection it was essential to adhere to General Alfred

Gray's admonishment to "not make any more enemies then we already have." Urban

warfare demonstrated the need to train, equip, and organize small forces with diverse

capabilities. Military leadership at all levels had to understand the political requirements

of countering terrorism because of the constraints that commonly preclude the use of

conventional firepower, indirect support and airpower that conventional tactics might

suggest. Unconventional combat skills constrained by self-discipline to operate under

stringent restrictions are needed – military arrogance is not.

Maneuver and firepower were poor and without decisive effects. Maneuver was

poor because of bad doctrine and training. Military personnel were deployed on foot,

without support from armored vehicles. Firepower was reduced within the cities.

Because of non-existent ROE, international law influenced each individual as to how to

conduct the fire. The military units were deployed to protect political-administrative

buildings and to interdict demonstrations. They performed duties similar to the Ministry

of Interior forces, with girdles of soldiers, patrols and fixed checkpoints. They could use

only light infantry weapons, and only in specific situations.

Logistics activity during the first period of Romanian Revolution was at its best.

The soldiers were supplied with food, water, and ammunition in a timely menner. The

units had stocks for ten days of fighting. The supply and medical support were assured

by military and civilian facilities within the theater and with other areas support.

The day of December 21 changed the popular revolt into a revolution. The

Armed Forces colluded with popular revolt. Its new mission now was to protect the

revolutionary ideals and its leadership, to fight against terrorists, and to deny foreign

intervention.

The terrorists' psychological operations (PSYOPS) increased after the Cheauchescus escaped with a helicopter from the Central Committee. Their plan was to make the Armed Forces fight against the Security, necessitating then a Warsaw Pact intervention in Bucharest. From the beginning, the terrorists conducted disinformation operations to disrupt the civilian-military command and control and to influence domestic and international public opinion. The terrorists used false rumors and the interception of telecommunications (telephone) to transmit alarm orders and dispositions in order to put military and Security units face-to-face. They also used special disposals to imitate sounds. The ideological propaganda using losses and media was a great opportunity to influence the soldiers' morale.

To obtain a synergetic effect, the terrorists combined PSYOPS with Electronic Warfare (EW). They used this type of information operations to paralyze the Romanian Air Defense fire and command and control system. The Romanian Armed Forces had no means to counter EW assets; this prevented them from executing key fire support tasks and disseminating warning and operational orders (OPORD). The Romanian Armed Forces were defeated asymmetrically. Their anti-aircraft artillery (cannon and missiles) was rendered irrelevant by a system for which, due to its dissimilarity, they had no counter.

Terrorists saw the troop's morale as an operational center of gravity. The troops' morale was low. Their combat training and preparedness were reduced. This lack of readiness was due to a new contingent of conscripts (just incorporated in the military), the use of the military to assist the government in managing the economy, poor

equipment and special weapons to counter urban guerrilla, and commanders' lack of experience in urban operations. All these reasons led to fratricide during the Romanian Revolution.

> The training of an army in a period of time when is not necessary the using of it, can be translate through an economic loss for a country; but when the army must be used and it is inefficient because it has not men, means, logistic support, that means many human lives loss. This responsibility must press hard on all leaders' consciousnesses.[61]

Conclusions

Fighting in urban areas is certainly nothing new; military forces have been involved in urban warfare since the very beginning of civilization. From the walls of Hue to the "bridges of Belgrade" urban areas have always held military value. The commanders at all levels, however, have rarely entered urban area willingly, instead preferring the maneuver and firepower advantages afforded by open terrain. Normally, urban areas were bypassed or besieged in order to avoid fighting in close confines or injuring the non-combatant populace.

The new generation of wars theories after the World War Two (the nuclear war, the small wars, and the military operations other than war - MOOTW) rapidly expanded the strategic significance of urban areas. Without learning to operate effectively in urban areas, a Romanian Military Doctrine of "acting as in World War Two" is largely unsuitable. Unconventional wars cannot rely on traditional doctrine. Revolutionary guerrilla warfare, insurgency and counter-insurgency, anti-drug operations, and military operations other than war have been conducted on urbanized terrain. The last military operation of the Romanian Armed Forces were conducted in urban areas. Likewise, the

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[61]_____. *"Freedom",* a Romanian Daily Newspaper, December 22, 1989, p.3.

Romanian Armed Forces involvement in the 1989 revolution demonstrate that Romanian military units must be prepared to confront urban challenges at home as well as abroad.

Many believe that modern armies are not prepared to conduct combat in close quarters. The Romanian Armed Forces are in this situation now. Today Romanian commanders at all levels cannot see into the urban battle space, cannot communicate in it, cannot move their units in it, and, because of the legal requirement to limit non-combatant casualties and collateral physical damage, cannot effectively shoot into it. While a new doctrine is in the work, it will improve our ability to fight tomorrow's battles with yesterday's technology. A revolution in organization, training, and equipment for urban operations is necessary.

Future urban operations will embrace the entire spectrum of war, from stability operations against lightly armed paramilitary forces to the "real wars against real enemy in real cities". To win in this broad spectrum of war, Romanian Armed Forces must balance the importance of both advanced technology system and the human component. Leadership, decision-making, memory, courage, and susceptibility to stress, disease, or even chemical-biological agents, will enhance the capabilities of future urban forces to enable relatively small numbers of highly trained soldiers to defeat significant enemy concentrations in large urban areas. The advanced technology systems of the future will help the soldiers to win the urban fight, but will not fight the urban battle.

The focal point of contemporary violence and the likeliest scene of future violence is the city. Nobody can know yet if this is a psychological response to history or a biological reaction to proximity or something else entirely. The continuously increasing size and number of cities will pose practical challenges for urban operations.

Even in the smoothest operation, cities consume troops; in combat, they devour armies. The Romanian Revolution claimed the life of almost 44 officers, 29 non-commissioned officers (NCO), 155 soldiers, and 7 civil personnel who worked for Ministry of National Defense. The urbanization of the world's masses may well require centuries of adjustment.

APPENDIX A
CENTURY CONFLICTS IN CITIES

CONFLICT	*COUNTRY*	*CITY*	*YEAR*
KOREAN WAR	KOREA	SEOUL	1950
HUNGARIAN REVOLUTION	HUNGARY	*BUDAPEST	1956
ARAB-ISRAELI WAR	LEBANON	BEIRUT	1958

AMERICAN INTERVENTION	DOMINICAN REPUBLIC	SANTA DOMINGO	1965
VIETNAM WAR	VIETNAM	SAIGON HUE KONTUM QUANGTRI CITY AN LOC SAIGON XUAN LOC	1968 1968 1968 1972 1972 1975 1975
ARGENTINIAN REVOLUTION	ARGENTINA	MONTEVIDEO	1972
IRISH CIVIL WAR	UNITED KINGDOM	BELFAST	1972
ARAB-ISRAELI WAR	LEBANON	BEIRUT	1975-8
AMERICAN INTERVENTION	NICARAGUA	MANAGUA	1978
USSR INTERVENTION	AFGANISTAN	KABUL	1978-87
TURKISH-GREEK WAR	CYPRUS	TYRE	1982
ARAB-ISRAELI WAR	SYRIA	SIDON	1982
AMERICAN INTERVENTION	PANAMA	PANAMA CITY	1989
ROMANIAN REVOLUTION	ROMANIA	*BUCHAREST	1989
SOMALIAN CIVIL WAR	SOMALIA	*MOGADISHU	1992-4
RUSSIA INTERVENTION	CHECHNYA	GROZNY	1994
BOSNIAN CONFLICT	BOSNIA	*SARAJEVO	1995
KOSOVO CONFLICT	SERBIA	BELGRADE	1999
RUSSIA INTERVENTION	CHECHNYA	GROZNY	2000

*DIRECT ROMANIAN INVOLVMENT

APPENDIX B
THE CHARACTERISTICS OF BUILT-UP AREAS[62]

TYPE
GENERAL CHARACTERISTICS

A.   Dense, random
                        construction. Typical old inner city

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[62] FM 90-10, p.3.

construction with narrow winding streets radiating in an irregular from a central area.   Found within cities, towns, and villages.   Buildings are located close together and frequently along the edge of roadways.

B.   Closed-orderly. Block Common to central areas of towns and cities.   Wider streets forming generally rectangular pattern with buildings frequently forming a continuous front along a block.   Inner block courtyards are common.

C.   Dispersed residential area.   Normally contiguous to type B areas.   Consists of row houses or single dwellings with yards, gardens, trees, and fences.   Street pattern is normally rectangular or curving.

D.   High-rise area.   Typical of modern construction in larger towns or cities.   Consists of multi apartments, separated large open areas and one-story buildings.   Wide streets are laid out in rectangular patterns.

E.   Industrial/Transportation.   Older complexes may be found within type A and B areas.   New construct -normally consists of low, flat-roofed factory and warehouse buildings.   Generally located on or along the major rail and highway routes of the urban complex.

APPENDIX C

Typical Attack Zones by Type Built-up Areas. (Meters)[63]

A
are typical zone widths for elements of
150-200
in various types of built-up areas

briefly in Appendix A.

Portrayed
a main attack
described

B
200-300
restrictive nature of the urban terrain

mobility, observation, and fields of fire, and

complicates all command and control functions. These

coupled with the need to concentrate combat

necessitate reducing the width of attack zones

to units.

The highly
reduces
factors,
power,
assigned

C
300-400
area, typical widths will be

significantly less than those experienced on open

During the attack, a company team will seldom

assigned a zone greater than one to two blocks in
D
will vary based on enemy defense and type
300-500

Within an urban
terrain.
be
width. This
of built-up area.

E
dimensions can only be determined by
400-600
of the urban terrain complex as

Appendix A.

Actual zone
detailed analysis
described in

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[63] FM 90-10, p.12.

APPENDIX D
International Law's Treaties and Documents

a. Treaties and Documents

Declaration Respecting Maritime Law. Paris, 16 April 1856.

- [ ] Instructions for the Government of Armies of the United States in the Field (Lieber Code). 24 April 1863.
- [ ] Resolutions of the Geneva International Conference. Geneva, 26-29 October 1863.
- [ ] Convention for the Amelioration of the Condition of the Wounded in Armies in the Field. Geneva, 22 August 1864
- [ ] Additional Articles relating to the Condition of the Wounded in War. Geneva, 20 October 1868.
- [ ] Declaration Renouncing the Use, in Time of War, of Explosive Projectiles Under 400 Grammes Weight. Saint Petersburg, 29 November / 11 December 1868.
- [ ] Project of an International Declaration concerning the Laws and Customs of War. Brussels, 27 August 1874.
- [ ] The Laws of War on Land. Oxford, 9 September 1880.
- [ ] Final Act Of the International Peace Conference. The Hague, 29 July 1899.
- [ ] Convention (II) with Respect to the Laws and Customs of War on Land and its annex: Regulations concerning the Laws and Customs of War on Land. The Hague, 29 July 1899.
- [ ] Convention (III) for the Adaptation to Maritime Warfare of the Principles of the Geneva Convention of 22 August 1864. The Hague, 29 July 1899.
- [ ] Declaration (IV,1), to Prohibit, for the Term of Five Years, the Launching of Projectiles and Explosives from Balloons, and Other Methods of Similar Nature. The Hague, 29 July 1899.
- [ ] Declaration (IV,2) concerning Asphyxiating Gases. The Hague, 29 July 1899.
- [ ] Declaration (IV,3) concerning Expanding Bullets. The Hague, 29 July 1899.
- [ ] Convention for the Exemption of Hospital Ships, in Time of War, from The Payment of all Dues and Taxes Imposed for the Benefit of the State. The Hague, 21 December 1904.
- [ ] Convention for the Amelioration of the Condition of the Wounded and Sick in Armies in the Field. Geneva, 6 July 1906.
- [ ] Final Act of the Second Peace Conference. The Hague, 18 October 1907.
- [ ] Convention (III) relative to the Opening of Hostilities. The Hague, 18 October 1907.
- [ ] Convention (IV) respecting the Laws and Customs of War on Land and its annex: Regulations concerning the Laws and Customs of War on Land. The Hague, 18 October 1907.
- [ ] Convention (V) respecting the Rights and Duties of Neutral Powers and Persons in Case of War on Land. The Hague, 18 October 1907.

- [ ] Convention (VI) relating to the Status of Enemy Merchant Ships at the Outbreak of Hostilities. The Hague, 18 October 1907.
- [ ] Convention (VII) relating to the Conversion of Merchant Ships into War-Ships. The Hague, 18 October 1907.
- [ ] Convention (VIII) relative to the Laying of Automatic Submarine Contact Mines. The Hague, 18 October 1907.
- [ ] Convention (IX) concerning Bombardment by Naval Forces in Time of War. The Hague, 18 October 1907.
- [ ] Convention (X) for the Adaptation to Maritime Warfare of the Principles of the Geneva Convention. The Hague, 18 October 1907.
- [ ] Convention (XI) relative to certain Restrictions with regard to the Exercise of the Right of Capture in Naval War. The Hague, 18 October 1907.
- [ ] Convention (XII) relative to the Creation of an International Prize Court. The Hague, 18 October 1907.
- [ ] Convention (XIII) concerning the Rights and Duties of Neutral Powers in Naval War. The Hague, 18 October 1907.
- [ ] Declaration (XIV) Prohibiting the Discharge of Projectiles and Explosives from Balloons. The Hague, 18 October 1907.
- [ ] Final Protocol to the Naval Conference of London, 26 February 1909.

b. 1949 Conventions and 1977 Protocols

- [ ] Convention (I) for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field. Geneva, 12 August 1949.
- [ ] Convention (II) for the Amelioration of the Condition of Wounded, Sick and Shipwrecked Members of Armed Forces at Sea. Geneva, 12 August 1949.
- [ ] Convention (III) relative to the Treatment of Prisoners of War. Geneva, 12 August 1949.
- [ ] Convention (IV) relative to the Protection of Civilian Persons in Time of War. Geneva, 12 August 1949.
- [ ] Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I), 8 June 1977.
- [ ] Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of Non-International Armed Conflicts (Protocol II), 8 June 1977.
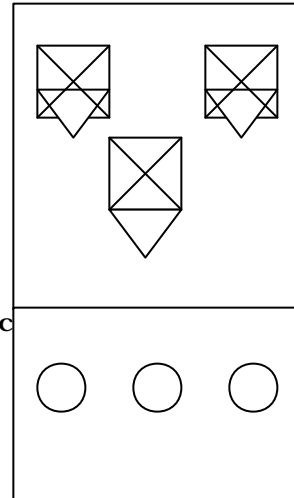
APPENDIX E

International Law's Special Marks for Buildings

1. Buildings under General Protection.
   (a) Religious and Medical Facilities

   (b) Cultural Property.
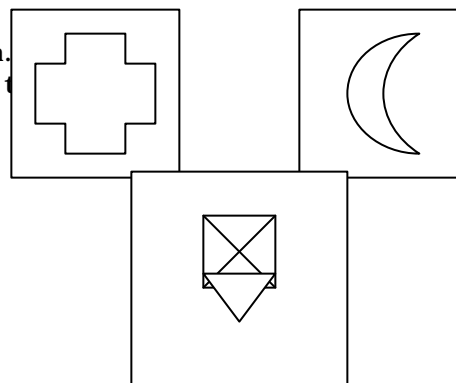
2. Buildings under Special Protection.

    (a)   Cultural Property.

    (b)   Installations with "Dangerous Forc

Glossary

city. An administrative defined unit of territory containing "a relatively large, dense and permanent settlement of socially heterogeneous individuals" (Wirth, 1938).

urban. A set of socialized, nonagricultural activities that are characteristic of, but not exclusive to, city dwellers (Childe, 1950).

urban district. An administrative district composed of several densely populated communities (The American Heritage College Dictionary, 2000).

urbanized. To make urban in nature or character (The American Heritage College Dictionary, 2000).

urban sprawl. The unplanned, uncontrolled spreading of urban development into areas adjoining the edge of a city (The American Heritage College Dictionary, 2000).

Bibliography

Accoce, Pierre, and Dr.Rentchnick, Pierre *"The Invalids who Lead Us"*, Z-2000 Publishing House, Bucharest, 2000.

Ambrose, Stefan E., and Brinkley, Douglas G. *"Rise to Globalism: American Foreign Policy since 1938."* Eight Revised Editions, Penguin Books, 1997.

Arkin, William M., Durrant, Damian, and Cherni, Marianne *"On impact: modern warfare and the environment: a case study of the Gulf War."* Washington D.C.: Green peace, 1991.

Ashworth, G.J. *"War and the City."* London: Rout ledge, 1991.

Best, Geoffrey *"War & Law since 1945"* Clarendon Press, 1994.

Brown, CAPT Kevin W. USMC. *"Historic Close Support in MOUT."* Unpublished research paper. Quantico, VA: Studies & Analysis Division, MCCDC. December 1996.

Clausewitz, Carl von *" On War"*, edited and translated by Michael Howard and Peter Paret, Princetown University Press, NJ, 1984.

Cole, COL Ray, USMC. *"Land and Littoral Warfare."* Overhead Briefing Slides for Joint War fighting Capabilities Assessment Division. Washington D.C., October 1996.

Cooling, MAJ Norman L, USMC. *"Shaping the Battle space to win the Street Fight."* MMS Thesis. Quantico, VA: USMC Command and Staff College, May 2000.

Davis, Kevin I. *"Urbanization in the Third World: Implications for ARSOF in the 21st Century."* Monterey, CA: Naval Postgraduate School, 1996.

Dzirkals, Lilita I., Konrad Kellen, and Horst Mendershausen *"Military Operations in Built-Up Areas; Essays on Some Past, Present, and Future Aspects."* R-1871-ARPA. Santa Monica, CA: The Rand Corp., June 1976.

Everman, MAJ Mark P., USMC. *"Marine Aviation: Relevant in MOUT?"* MMS Thesis. Quantico, VA: USMC Command and Staff College, May 1997.

Everson, Robert E. *"Standing at the Gates of the City; Operational Level Actions and Urban Warfare."* Fort Leavenworth, KS: U.S. Army Command and General Staff College. School of Advanced Military Studies, 1995.

Gaddis, John L. *"Strategies of Containment: a Critical Appraisal of Postwar American National Security Policy."* Oxford University Press, New York, 1997.

Goligowski, Steven P. *"Future Combat in Urban Terrain: Is FM 90-10 Still Relevant?"* Fort Leavenworth, KS: U.S. Army Command and General Staff College. School of Advanced Military Studies, 1994.

Hahn II, Robert F. and Jezior, Bonnie "Urban Warfare and the Urban Warfighting of 2025", *Parameters*, US Army War College Quarterly, summer, 1999, http://carlise-www.army.mil/usawc/Parameters/99summer/hahn.htm.

Hedelung, LT.COL Robert F., USMC. *"Marine Corps Assault Support and the Urban Century."* MMS Thesis. Quantico, VA: USMC Command and Staff College, May 2000.

Higgins, Pearce A. *"The Hague peace conference and other international conferences concerning the laws and usages of war: texts of conventions with commentaries."* Cambridge [England]: University Press, 1909.

Ionescu, Vlaicu *"The Message of Nostradamus to Romanians"*, Roza Vanturilor Publishing House, Bucharest, 1998.

Jablonsky, David "National Power", *Parameters*, spring 1997.

Kissinger, Henry *"Diplomacy"* Touchstone Rockfeller Center, New York, 1994.

Molofsky, MAJ Joseph, USMC. *"The Relationship of Urbanization to the Insurgency in the Gaza Strip."* MMS Thesis. Quantico, VA: USMC Command and Staff College, May 1997.

Nethery, Phillip T. *"Current MOUT Doctrine and Its Adequacy for Today's Army."* Fort Leavenworth, KS: U.S. Army Command and General Staff College. School of Advanced Military Studies, 1997.

Pictet, Jean *"The Geneva Conventions of 12 August 1949: commentary."* Geneva: International Committee of the Red Cross, 1952-1960.

Ralph, Peter "The Human Terrain of Urban Operations", *Parameters*, Spring 2000.

Reisman, Michael W., and Antoniou, Chris T. *"The Laws of War: a comprehensive collection of primary documents on international laws governing armed conflict."* A Division of Random House, Inc.-New York, 1994.

Sava, Constantin, and Monac, Constantin *"Truth about December 1989: Conspiracy, Diversion, Revolution – Documents from the Armed Forces' Archive"*, Forum Publishing House, Bucharest, 1999.

Schenkel, MAJ Gary, USMC. *"Urban Warrior Orientation"* Brief presented at the Marine Corps Research Center for the Urban Warrior Aviation SME Working Group Quantico, VA, 12 February 1997.

Stanciulescu, Stefan *"Violence, Myth, and Revolution"*, All Educational Publishing House, Bucharest, 1998.

Sun Tzu *"The Art of War"* translated by Samuel B.Griffith, Oxford University Press, London, 1963.

Watson, MAJ Leah USMC. *"The Use of Military Force in Combating Urban Crime Using British Royal Marines in Northern Ireland as a Model."* MMS Thesis. Quantico, VA: USMC Command and Staff College, May 1996.

_____. *"Freedom"*, Romanian Daily Newspaper, December 22, 1989.

_____. *FMFRP 12 – 18* "Mao Tse-tung on Guerilla Warfare", USMC, 1989.

_____. *"Military Observer"*, Romanian Military Newspaper, December 21-27, 1994.

_____. *"Operational Art and Military Operations on Urbanized Terrain."* Fort Leavenworth, KS: U.S. Army Command and General Staff College. School of Advanced Military Studies, 1995.

_____. *"The People's Spark",* Romanian Daily Newspaper, December 24, 1989.

_____. *"The Urban Anatomy: The Fundamentals of a City."* Fort Leavenworth, KS: U.S. Army Command and General Staff College. School of Advanced Military Studies, 1995.

_____. "*F.M.27-10, Chapter 5 Civilian Persons"*, http://155.217.58.58/cgi-bin/atdl.dll/fm/27-10/Ch5.htm.