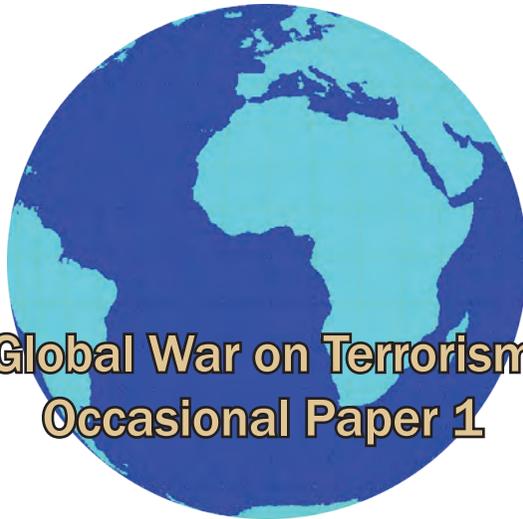




# Traditions, Changes, and Challenges: Military Operations and the Middle Eastern City

---

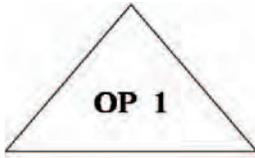
Lieutenant Colonel Louis A. DiMarco, US Army



## Global War on Terrorism Occasional Paper 1



Combat Studies Institute Press  
Fort Leavenworth, Kansas



# **Traditions, Changes, and Challenges: Military Operations and the Middle Eastern City**

---

by  
Lieutenant Colonel Louis A. DiMarco, US Army



Combat Studies Institute Press  
Fort Leavenworth, Kansas

---

Library of Congress Cataloging-in-Publication Data

DiMarco, Louis A., 1959-

Traditions, changes, and challenges : military operations and the Middle Eastern city / Louis A. DiMarco.

p. cm.

1. Cities and towns—Middle East. 2. Urbanization—Middle East. 3. Historic districts—Middle East. 4. Central business districts—Middle East. 5. Urban warfare—Middle East. I. Title.

HT147.M628D56 2004

307.76'0956—dc22

2004020718

## Foreword

In July 2002 the Combat Studies Institute (CSI) was reconstituted and given a new charter by the US Army Training and Doctrine Command (TRADOC) commander, General John Abrams. One of the three missions outlined in that charter is to conduct original, interpretive research on historical topics pertinent to the current doctrinal concerns of the US Army. Having published some 10 works in the intervening two years, CSI is now poised to initiate a new series addressing important facets of the Global War on Terrorism. Lieutenant Colonel Louis DiMarco's *Traditions, Changes, and Challenges: Military Operations and the Middle Eastern City* is the first in that series called *Occasional Papers*.

The Middle East is one of the most urbanized regions of the world, and growth continues at an unprecedented rate. With operations ongoing in the Middle East today, it is fitting that this inaugural study should focus on military aspects of the urban areas of that region. There is an undoubted need for US military planners to possess a solid foundation of military history, cultural awareness, and an understanding of the intricacies of city design and function in this critical region. Each conflict brings its own challenges and dynamics. The challenges of a Middle Eastern fight require decisive involvement in that region's cities. The enemy is adaptive—we must be adaptive as well. This call to study and understand history and culture is the first step along that road to critical thinking and adaptability.

Thomas T. Smith  
Lieutenant Colonel, Infantry  
Director of Combat Studies



# Contents

Foreword.....	i
Figures.....	iv
Preface.....	v
Chapter 1. Urbanization in the Middle East.....	1
Chapter 2. Models of the Middle Eastern City.....	5
Chapter 3. Traditions: Characteristics of the Old City Center.....	17
Chapter 4. Changes: Transition to the Modern City.....	41
Chapter 5. Challenges: The Negative Impact of Modernity.....	51
Chapter 6. Conclusions.....	59
Bibliography.....	65

# Figures

## *Chapter 1*

Figure 1. Middle East Region.....	2
-----------------------------------	---

## *Chapter 2*

Figure 2. The Zeigler Model.....	8
----------------------------------	---

Figure 3. The Multiple-nuclei Model.....	9
--	---

## *Chapter 3*

Figure 4. Main Components of the Traditional Old City.....	17
--	----

Figure 5. Photo: Haghia Sophia Mosque.....	18
--	----

Figure 6. Photo: Iraqi Neighborhood Mosque.....	19
---	----

Figure 7. Standard Mosque Components.....	20
---	----

Figure 8. Continuum of Relative Interests.....	22
--	----

Figure 9. Photo: Local Marketplace, Iraq.....	26
---	----

Figure 10. Photo: Old City Alley, Cairo.....	28
--	----

Figure 11. Layout of Saudi Arabian Courtyard Home.....	29
--	----

Figure 12. Layout of Syrian Courtyard Home.....	30
---	----

Figure 13. Details of Syrian Courtyard Home.....	30
--	----

Figure 14. Details of Iraqi Courtyard Home.....	31
---	----

Figure 15. Photo: Patrolling Through an Iraqi Neighborhood.....	32
---	----

Figure 16. Major Components of a Residential Quarter.....	34
---	----

## *Chapter 4*

Figure 17. Photo: Modern Cairo.....	46
-------------------------------------	----

## *Chapter 6*

Figure 18. Photo: The Al Azhar Mosque, Cairo.....	61
---	----

## Preface

The purpose of this work is to examine the major features of the Middle Eastern city and evaluate the military significance of those features. It intends to serve as a starting point for military professionals, particularly commanders and key staff officers at the Army battalion through corps level, planning or conducting operations in the region. This study should provide the context within which more detailed study, evaluation, and observation can be conducted. Although this study is mindful of the ongoing Operation IRAQI FREEDOM (OIF) fight, it was initiated before OIF began and does not specifically reflect its area of operations or lessons learned.

This study emphasizes the traditional aspects of the Middle Eastern city because those features are most unique and distinct from western European and North American city design with which military professionals are familiar. In addition, the old city core is often the center of religious activity and thus is disproportionately politically and socially influential. The physical aspects of the traditional Middle Eastern city are examined here in detail—mosques, *souqs*, residences, and quarters. Also examined in some depth is the less obvious relationship between the Islamic religion and the Middle Eastern urban environment. How the modern Middle Eastern city has changed from its traditional form and the challenges associated with that rapid change are also covered in this study.

These facets of the old Middle Eastern city are examined by reference to contemporary travel guides; academic works in the fields of Middle East history, urban geography, history, architecture, and city design; appropriate military manuals and publications; and contemporary travel narratives. This work connects the description of Middle Eastern city design to the conduct of full-spectrum military urban operations. It does this through referencing American and Israeli urban warfare experts, current Army and Joint doctrine described in US Army Field Manual 3-06, *Urban Operations* and Joint Publication 3-06, *Joint Urban Operations*, other relevant official publications, and historical experiences. Although the author did conduct limited travel in some of the region's urban centers, circumstances require that this paper primarily rely on open-source research.

Finally, the reader should understand that this work is a survey of general regional characteristics. As in the case of any general survey, individual cases can and will vary, sometimes greatly, from the patterns described. However, prior knowledge of the general pattern makes the inevitable deviations more obvious and easier for one to understand.

Several individuals who helped make this study possible and provided valuable insight and comments must be thanked: Karen De Bres, Ph.D., Kansas State University; Russell Glenn, Ph.D., RAND Corporation; Colonel French MacLean, National Defense University; Colonel Clay Edwards, Combat Studies Institute; Lieutenant Colonel Michael Chura, US Army Combined Arms Doctrine Directorate; and the staff of the Combat Studies Institute's Research and Publications Division, Fort Leavenworth, Kansas. All errors and omissions contained herein are the sole responsibility of the author. The analysis and opinion presented in this work are the author's own and do not represent the official views of the US Army.

# Chapter 1

## Urbanization in the Middle East

Since the end of the Cold War and the transition to the 21st century, the Middle East has become the most important region in the world, in terms of economic, cultural, and national security interest, to the United States. September 11, 2001 demonstrated that disinterest and disengagement in this region is not an option for the US government. Therefore, military professionals must understand this region in all its complex military, economic, cultural, and political dimensions. Unfortunately, most Americans' general knowledge of the Middle East is quite limited, particularly when it comes to understanding the Middle Eastern city.<sup>1</sup> This work describes some important common characteristics of the Middle Eastern city, emphasizing the traditional core "old city" and how those characteristics may influence military operations. The old city center still has continued importance as the nexus of the urban environment's political, cultural, and religious energy. Understanding how military force may influence and be influenced by the Middle Eastern city informs the military commander's conduct of urban operations. It is one of the keys to military success in the city and in the region at all levels of war.

The popular image of the Middle East is of vast deserts, camel caravans, and unlimited petroleum production facilities. What most individuals do not envision though is urbanization. The Middle East is a region where the city dominates society. According to studies by the UN Department of International Economic and Social Affairs, virtually every country in the Middle East has counted over 50 percent of its population as urban residents since the year 2000. That same institution projects that two of the most important states of the region, Iraq and Saudi Arabia, will count over 80 percent of their populations as urban residents by 2020.<sup>2</sup> Truly understanding the region's economy, politics, and culture lies in understanding its unique urban geography. This UN projection also illustrates that a critical aspect of any type of military operation in the region will likely involve large-scale urban operations. In this study, we will examine the region's broad trends of urbanization, several models of the Middle Eastern City, the common characteristics of Middle Eastern urban areas, changes to the traditional cityscape, problems and challenges faced by urban planners and leaders in the Middle East, and the military implications of all these issues.



to the Islamic nations of North Africa and, to a lesser extent, to Islamic nations in central and southwest Asia.

Surveying the Middle East shows that national populations are concentrated in the large urban areas of the region. This is not surprising given that most scholars agree the first significant human civilizations began along the banks of the two great river areas of the region: the Tigris and Euphrates Rivers in Iraq and the Nile River valley in Egypt. It was in these areas that the first great cities of the world were founded and flourished.<sup>3</sup> Today, the area is still dominated by large cities—22 cities of the region have populations over one million and the region's two largest, Tehran and Istanbul, rank 20th and 21st in population size worldwide. In these 22 large urban concentrations live 20 percent of the region's population.<sup>4</sup> Among these cities are national capitals, the centers for economic activity, and the region's important religious centers. A military force desiring to create decisive effects in the region will have to achieve those effects within these critical urban centers.

The Middle East, contrary to popular conception, is one of the most urbanized regions in the world. Arguably, it has had a history, culture, and economy focused on urban life longer than any other world region. Because of this long history, definitive theories exist about the structure of the Middle Eastern city. This long history still heavily influences the structure and function of the Middle Eastern city. At the same time, cities in the Middle East are in the midst of profound change. Modernization holds the promise of increased quality of life for the Middle Eastern urban populations, but it also brings a host of associated problems and challenges. Successful military operations in the Middle East must include effective operations within the region's urban centers. To be successful, commanders and staffs must be familiar with the traditions of the cities, the ongoing changes, and the challenges that these cities face.

## Notes

1. Dana J. Stewart, "Middle East Urban Studies: Identity and Meaning," *Urban Geography* 22 (2001): 177.
2. Stanley D. Brunn, Jack Francis Williams, and Michael E. Bonine, *Cities of the World: World Regional Urban Development*, 2d ed. (New York: Harper & Row, 1997), 306.
3. Lewis Mumford, *The City in History: Its Origins, Its Transformations, and Its Prospects* (New York: Harcourt Brace Jovanovich, 1961), 57-61.
4. Dana J. Stewart, "Middle East Urban Studies II: Growth, Environment and Economic Development," *Urban Geography* 23 (2002), 388.

## Chapter 2

### Models of the Middle Eastern City

History and population demographics illustrate that the urban centers of the Middle East are a dominant aspect of society. Models of the urban area can help describe what influences the city, how the city has developed, and what the land use patterns are within the city. This chapter will describe three different models of the Middle Eastern city and discuss other major factors affecting the city that are not conducive to modeling such as geography, religion, colonial history, and the petroleum industry. Having a general knowledge of these factors and the various Middle Eastern urban models offers military commanders and their staffs insight into the unique Middle Eastern city structure and dynamic.

European Orientalist scholars, those who first studied the “orient” (all lands and peoples east of central Europe including North Africa, the Middle East, and all of Asia), created the first model of Middle Eastern urban design. This model, developed in the early 20th century, is known as the Islamic City Model. This model and two more recent ones, the Zeigler Model and the Multiple-nuclei Model, provide different and interesting analytical perspectives of the Middle Eastern city space, all of which must be considered.

The Islamic City Model does not focus on a physical description of the Middle Eastern city but, rather, describes it based on the underlying influence of the Islamic religion. Its title reflects the fundamental belief of those who designed the model that Islam was the dominant factor in regional urban design. Orientalist scholars believed that Middle Eastern city design reflected the relationship between the individual Muslim and his faith. This view was based on several tenets, including the idea that Islam is an urban religion because only in a city can faithful Muslims adhere to all their religion’s formal requirements. Princeton University Middle East scholar Bernard Lewis states that “the *Shari’a*, the [Islamic] Holy Law, is primarily concerned with the lives and problems of city-dwellers, which it examines and discusses and regulates in minute detail.”<sup>1</sup> Another reason for viewing Islam as an urban religion is that the Prophet Mohammed, himself a prosperous merchant in Mecca, was an urban citizen. The Islamic City Model postulates that Islam, as an urban religion, encourages converts to migrate to cities, encourages the creation of new cities, and influences all parts of life in cities where Islam dominates.

Other tenets of the Islamic City Model are based on Islam's influence on urban design. For example, the Islamic city is formless because Islam does not recognize special or separate status within communities. According to the model, the haphazard street pattern of winding alleyways and cul-de-sacs illustrates the influence that the *ulema's* (religious class formally trained in Islamic beliefs and dogma) informal leadership had in the city's planning and reflects the absence of bureaucratic central planning. Similarly, inwardly focused building styles and privacy-enhancing door designs reflect the religious desire for privacy, particularly for women. Islamic City Model advocates see the characteristics of the Islamic city in all areas of the world where Islam dominates; therefore, the application of the model is not limited to the geographic area of the Middle East.<sup>2</sup>

Though the theory is persuasive, many scholars disagree with the degree to which Islam influences the city. Geographer Dana J. Stewart of Georgia State University states in a 2001 article that the Islamic City Model has serious critics throughout the geography profession.<sup>3</sup> She explains that many scholars now see Islam as only one of a number of influences on Middle Eastern city design. Urban historian Nezar Al Sayyad, for example, challenges scholars who focus on Islam as the dominant influence on the Middle Eastern city. He contends that this scholarship reflects inadequate research because it only studies a few, not necessarily representative, samples, because it is the product of Western misconceptions and bias, and because Arab and Muslim scholars have perpetuated the myth of Islamic influence for political and nationalistic reasons.<sup>4</sup> Scholars like Al Sayyad see a much broader spectrum of influences on Middle Eastern cities, such as natural geography and climate, than do traditional Orientalist scholars.

Much current study of the Middle Eastern city attributes the design of the old city to the influence of nature or to historical factors other than Islam. Samir Abdulac, an urban geographer, explains how nature influences the design of the courtyard house and narrow city streets:

The external walls of the buildings included in city blocks are party walls or border narrow streets, thereby efficiently reducing their exposure to solar radiation. Streets with winding organic traces are well adapted to the relief; they offer to pedestrians a good protection from warm dusty winds and they help to keep

within the colder layers of air gathered during the night. Thanks to their usual deep sections, as well as to numerous cantilevers and coverings, the pedestrian areas provide shadowed areas that are keenly sought after for most of the day.<sup>5</sup>

Another theory suggests the Middle Eastern city reflects the medievalism of economic and political development that still prevailed in most Middle Eastern cities at the end of the 19th century. This view maintains Middle Eastern society was primarily a pedestrian one until very recent times, which influenced city design.<sup>6</sup> For example, unlike ancient and medieval European city designs where streets were built to accommodate Roman chariots and carts, Middle Eastern cities focused on accommodating pack animals such as donkeys and camels. As a result, streets are traditionally much more narrow and the requirement for straight avenues nonexistent. Also, some of the most recent scholarship indicates that, contrary to the male-dominated ethnic and religious homogeneity of the Islamic City Model, “ethnically mixed neighborhoods were common, extended families did not live in the same houses, the great majority of the houses faced the street, and women had considerable power as property owners.”<sup>7</sup> Thus, the applicability of the Islamic City Model, according to some, has significant shortfalls.

Despite its critics, however, the Islamic City Model still has strong defenders. Stewart considers one of the best works published on the Middle Eastern city to be Stefano Bianca’s *Urban Form in the Arab World: Past and Present*, published in 2000.<sup>8</sup> Bianca advocates for the applicability of the Islamic City Model. He sees strong design and artistic correlations across the Islamic world from North Africa to southwest Asia (Pakistan). Though he does not specifically refer to an Islamic City Model, virtually all the analysis in his work is based on the tenets of Islam and the manner in which religion drives the daily lives of the urban population and, hence, the design of homes and cities. About Islamic cities Bianca concludes that:

The special character and the practice of the Islamic religious order could not but influence the corresponding social structures and living habits. These were in turn clearly reflected in certain spatial preferences, basic urban layouts, and artistic concepts, which shaped the physical

appearance of the Islamic built environments.<sup>9</sup>

Bianca's strong advocacy indicates that the development of an accepted, generic model for cities in the Middle East remains an elusive area of study.

Debate over a regional or Islamic City design has largely focused on the traditional core city, the design of which remained relatively intact for hundreds of years. This debate, though, does not usually extend to the modern Middle Eastern city of the 20th century. Therefore, a need exists for a new generic model that reflects what is happening in the Middle Eastern urban area outside of the traditional old city core.

Urban geographer Donald Zeigler created a model of the modern, developing Middle Eastern metropolis that appears to apply the traditional concentric zone model of urban land use developed by E. Burgess at the University of Chicago in the 1920s.<sup>10</sup> Zeigler's model (see Figure 2), as was one of the major purposes of the Burgess original, accounts for the rapidly expanding urban populations of the Middle East. Zeigler explains:

The Middle Eastern city today, therefore, can be seen as an interlocking set of zones patterned in time: citadel, old city, new city, modern city, and urban expansion zone. As one moves from the innermost zone to the outermost, changes in urban form and function are evident.<sup>11</sup>

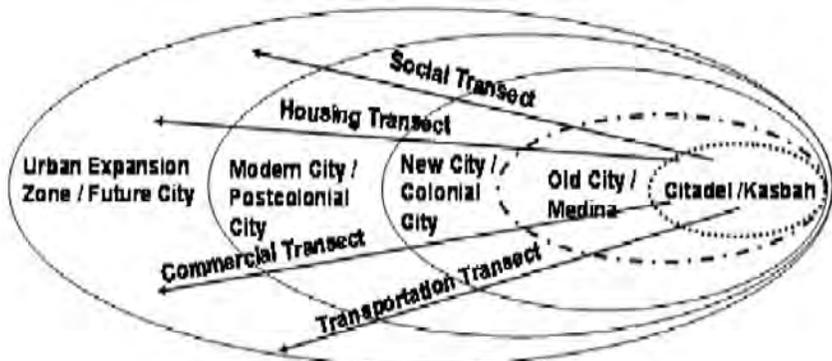


Figure 2. The Zeigler Model. Internal Structure of the Middle Eastern City (Donald Zeigler, source).

He then goes on to describe lines of transect in his model that indicate the

shift of the center of social activity, housing, commercial activity and transportation nodes from out of the old city center to the periphery.<sup>12</sup>

The Zeigler Model accurately depicts the history of Middle Eastern urban growth. However, Zeigler’s application of the Burgess model does not specifically indicate the diverse land-use activity that occurs as the Middle Eastern city expands over time or how the land-use activity may be arranged in space. Further, though Zeigler accurately depicts the numerous urban activities that are leaving or have left the old city and colonial city centers, he does not account for the growing phenomenon of radical Islam. This phenomenon is centered in the mosques and *madrassa* (religious school associated with many mosques) of the city and, as a consequence, is focused largely on the old city. One of the fuels feeding the growing radical Islamic movement is the various transects out of the city core, away from the traditional. The result is a transect of radical political and religious intellectual energy back into the city core. Thus, though in terms of space and population the traditional city core has grown proportionately smaller over time, in terms of political and intellectual and religious importance, it is still strong and proportionally growing stronger than other parts of the city.

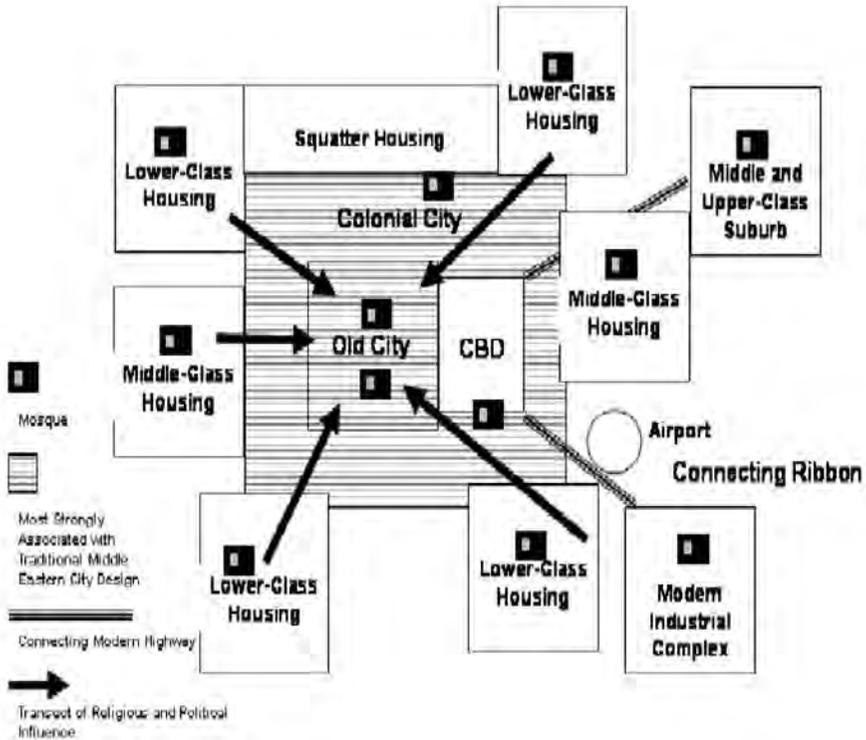


Figure 3. The Multiple-nuclei Model

The role of Islam as a unifying and powerful element in Middle Eastern city structure is represented in another model based on a modified version of the Multiple-nuclei urban land use one proposed by Professors C. Harris and Edward Ullman in 1945. Harris and Ullman proposed that urban areas “do not grow around a single CBD [central business district] but are formed by the progressive integration of a number of separate nuclei.”<sup>13</sup> In this Multiple-nuclei Model (see Figure 3) the sectors of the urban model form around a variety of nuclei, the most important of which is the mosque. The sectors also segregate themselves socio-economically. Each of the sectors tends to favor a particular social class and a unique level of economic prosperity.

At the center of the Multiple-nuclei Model is the traditional city core, the old city, predictably where important mosques, *madrassa*, and associated important religious functions are located. Often it is still the location of the city’s primary mosque, the Friday Mosque. The colonial city is a transitional zone around the old city core where modernity and traditional design and function intermingle. The colonial city may contain the CBD as well as key government institutions. Outside this center lies the modern Middle Eastern city that has developed over the past 50 years. This includes the major residential portions of the city, the middle- and lower-class residential districts, and squatter settlements. Other sectors, new industrial areas, transportation hubs (particularly international airports), and upper-class residential areas reflect more controlled modernization and capital investment. A transportation spine connects these latter areas with the CBD and the older, but still important, colonial district.

The traditional core in this model is still the heart of Middle Eastern city religious culture and is the focus of an inward transect of radical political and religious intellectual energy. The old *medina* (center of religious activity) retains its influence and its importance through the system of mosques that link it to the city’s various outlying quarters and suburban populations. As the radical Islamic movement grows, it strengthens these links from the traditional core to the outlying neighborhoods by encouraging the urban population to focus on its religious traditions and, hence, the old city.

All the important factors influencing the region’s cities are not reflected in the various Middle Eastern city models, even when they are combined. A number of factors not easily modeled affect the structure of the city including geography, religion, colonialism, and the petroleum industry.

Foremost among these is geography. The region's most important geographic factor is water—where it can be found. As a scarce commodity throughout the region, water-supply availability has usually been the deciding factor affecting where cities are located. Typically, cities reside in lower elevations at the source of water runoff from higher elevations. Major cities are rarely settled at the higher elevations themselves (an exception to this trend is Jerusalem, which is located at a relatively high elevation).

One reason major cities do not exist at higher elevations is connected to the second major factor influencing the location of Middle Eastern cities: trade. Most of the inland cities not only reside near water sources, they are also located at critical points along ancient overland caravan trade routes. These routes became important around 100 A.D. and remained economically critical until the 20th century. Damascus, in Syria, exemplifies how the confluence of a water source and a trade route can create a great city. Damascus lies on the banks of the Barada River that feeds into the city from high in the Anti-Lebanon mountain range. This abundant water supply serves 116 square miles of gardens and orchards, making the city's environs an agricultural center on the edge of the desert. Also, Damascus was settled on the western end of the west-to-east caravan trade route that extended east across 500 miles of desert to Baghdad, and from there through Persia (Iran) on to Asia.<sup>14</sup> Thus, the placement of Damascus was driven first by natural geography and second by economics. Other prominent Middle Eastern cities, Baghdad among them, owe their location to circumstances similar to Damascus.

The geography and climate of the region not only contribute to where cities are situated, they also contribute to the likelihood of urban operations. Given a choice between operating in harsh desolate terrain characterized by extreme heat, lack of water, and little or no cover and concealment, and given the history of US military capabilities to destroy targets located in exposed open desert terrain, a Middle Eastern adversary is much more likely to fight from within the protection of the city. Because of trade's influence on where cities reside, virtually all militarily significant natural routes in the region transect major urban areas. Accordingly, the maneuver of large military formations in the region must intersect the location of important cities.

Religious shrines and devotions also played an important role in the formation of some major cities. The two obvious examples of this phenomenon are Mecca in Saudi Arabia and Jerusalem in Israel.<sup>15</sup> The Iraqi city of

Karbala, a focal point of Shi'ite Muslims, is also an important religious city.<sup>16</sup> Though these cities predate the religious significance of the location, their current size and importance are primarily connected to their religious symbolism. Commanders must be aware of the religious history of all urban areas within their area of operations and how that history might influence current operations. Because of the close relationship between religion and daily life in the region, all units of battalion size or larger should ensure a staff member is tasked with the responsibility for specific religious-knowledge expertise. The unit chaplain is a possible source for this type of information and should be consulted during the planning process. The religious significance of various cities in the region, as well as specific shrines within cities, may influence an adversary's actions, affect the overall strategic context of an operation, and require that the commander make operational adjustments beyond those dictated by the tactical military situation. Combat operations in and around religiously important facilities and areas should be avoided if at all possible and should be conducted very precisely when not avoidable.

Another factor that influenced the nature of the Middle Eastern city is colonialism. Colonialism's influence in the Middle East was unique compared to other parts of the world in that its influence was not strongly felt until the late 19th and early 20th centuries. Even then, Middle Eastern culture, unlike others, was very resistant to external pressures; thus, the impact of colonialism, though important, was not as strong as it was in other world regions.<sup>17</sup> One primary way colonialism altered the Middle East was by drawing the center of economic activity and culture away from the major cities of the interior to the port cities where European influence was greatest. Increased economic activity stimulated a rural-to-urban migration that greatly enlarged the urban populations of port cities such as Alexandria and Beirut. Colonialism also affected local economic systems. Imported goods and agricultural products significantly reduced the importance and scale of local craft industry and agriculture.<sup>18</sup>

Middle Eastern colonial influence also had political consequences. Decisions made by the colonial powers (primarily Britain and France) determined which cities would be capitals, which families would rule, and the geographic boundaries of nations that would become independent in the latter half of the 20th century.<sup>19</sup>

The colonial influence of the past is militarily significant today. Most major urban areas in the region cannot be sustained from the surrounding

agricultural productivity. Commanders controlling a Middle Eastern city must account for importing food and other critical life-sustaining products for the population. Since colonialism has created arbitrary international borders, many religious and ethnic groups, tribes, and clans are located in cities near these arbitrarily drawn borders. Thus, military operations in border areas must be conscious of the cross-border ties of the urban population, as well as the possible strategic implications third-party foreign populations may create in that area.

Colonialism's influence on architecture and urban design also has military implications. This architectural influence affected areas outside of the old city walls in the colonial portion of the Multiple-nuclei Model (Figure 3). Here, Western-style construction and street patterns intermingle with the traditional form of the old city. The colonial city is a transition zone from medieval city design to 20th-century design. Wide avenues, rectangular street grids, and European buildings styles are dominant, yet alleys behind the more modern buildings may still lead into traditional residential areas. Tactics, techniques, and procedures (TTP) developed for modern cities worldwide can be applied with success in many parts of the colonial city. These TTP become increasingly effective when moving away from the city core toward the more modern environs of the city, in accordance with Zeigler's model of the city (Figure 2).

The third factor to influence development in many Middle Eastern cities is the petroleum industry. Its most obvious direct effect is the wealth this industry has made available to those Middle Eastern states with oil reserves. This wealth has permitted many Middle Eastern states to approach the issue of modernizing their cities with virtually no financial constraints. Indirectly, the oil industry created a major demographic change in the urban population through the importation of guest workers. These workers are necessary for the oil industry to meet its labor needs, and they are imported from poorer states in the region, as well as from far away nations such as Korea. Guest workers are not just critical to the host nation but also to the economy of the nation of origin. Journalist Judith Miller, in her book *God Has Ninety-Nine Names*, describes the relationship between guest-worker pay in the Gulf states and the local economy of the Egyptian city of Damietta:

Agriculture, including its famed watermelons, was no longer the town's major source of income, and Watermelon Village was no longer

a village. Its major industry was now furniture factories financed by worker's remittances repatriated by the three thousand villagers working in the Persian Gulf and Iraq. Gulf remittances had created not only a local demand for imported food and products, but also financed more than two hundred carpentry shops. Damietta was the carpentry capital of Egypt.<sup>20</sup>

Guest workers have become a large percentage of the urban population in many countries. In Kuwait, native Kuwaitis are the minority.

Some of the military implications generated by the petroleum industry are obvious. Control of this industry will be a priority military objective for any operation conducted in the region. To restore interrupted or damaged oil production, military commanders conducting urban operations may find it useful to know the demographics of the indigenous petroleum industry work force. With this information, a commander can locate the work force and leverage his ability to repair, manage, and operate this important commodity. Knowing where non-indigenous populations, such as guest workers, are located is also useful information for planning military operations. The guest-worker population also expands the local military commander's area of interest. Commanders must consider that decisions and operations relative to the guest-worker population may impact the guest worker's country of origin. An urban guest-worker population may be present and may have attitudes, talents, or capabilities different from the indigenous population; these must be considered for their potential to negatively or positively affect military operations.

Understanding the petroleum industry both from a business operations point of view and a cultural point of view may be critical to commanders operating in the region. Accessing specially skilled national intelligence or private business information sources through reach-back may be necessary to augment organic and attached assessment capabilities, and to ensure the commander has the information he needs to integrate technical knowledge of the petroleum industry into his vision of the urban battle space. The conduct of operations in and around petroleum production facilities may require obtaining specialized contractor support to properly maintain and secure facilities temporarily under military control.

Middle Eastern cities are unique in the world. Their singular geographic context, their history, the influence of Islam, the resistance to and influence

of colonialism, and the unprecedented impact of the petroleum industry all combine to create an urban space unlike any other. No single urban model captures the complexity of this space, but they each reflect critical aspects. The Islamic City Model reflects the all-pervading influence of religion, the Zeigler Model demonstrates the growth of the city over time, and the Multiple-nuclei Model reflects the complexity of the urban space and the central importance of the traditional old city core. Understanding these models, as well as the other factors influencing Middle Eastern urban design, is the starting point toward visualizing, planning, and executing successful urban operations in the region. The next step is to understand one of the key components of all three models: the traditional old city center.

## Notes

1. Bernard Lewis, *The Middle East: A Brief History of the Last 2000 Years* (New York: Simon and Schuster, 1995), 166.
2. Brunn, 1997, 309-10.
3. Stewart, 2001, 176.
4. Nezar Al Sayyad, *Cities and Caliphs: On the Genesis of Arab Muslim Urbanism* (New York: Greenwood Press, 1991), 39-41.
5. Richard Herbert ed. *Symposium on the Arab City: Its Character and Islamic Cultural Heritage (Paper Abstracts)* "The Relevance of Traditional Muslim Housing Designs for Contemporary Arab City Planners," by Samir Abdulac (Medina, Saudi Arabia: Arab Urban Development Institute, 1981), 2.
6. Stewart, 2001, 176.
7. Zeynep Çelik, "New Approaches to the 'Non-Western' City," *Journal of the Society of Architectural Historians* 58, no. 3 (September 1999): 375.
8. Stewart, 2001, 177.
9. Stefano Bianca, *Urban Form in the Arab World: Past and Present* (New York: Thames and Hudson, 2000), 28.
10. Michael Pacione, *Urban Geography: A Global Perspective* (London: Routledge, 2001), 132-34.
11. Stanley D. Brunn, Jack Francis Williams, and Michael E. Bonine, *Cities of the World: World Regional Urban Development*, 3d ed. (New York: Harper & Row, 2003), 271.
12. Brunn, 2003, 269-72.
13. Pacione, 135.
14. Philip K. Hitti, *Capital Cities of Arab Islam* (Minneapolis, MN: University of Minnesota Press, 1973), 61-62.
15. Brunn, 1997, 310-311.
16. Lewis, *The Middle East*, 67.
17. Pacione, 436.
18. Brunn, 1997, 313.
19. David Fromkin, *A Peace to End All Peace: Creating the Modern Middle East, 1914-1922* (New York: Owl Books, 2001), 563.
20. Judith Miller, *God Has Ninety-Nine Names* (New York: Simon and Schuster, 1996), 47.

## Chapter 3

### Traditions: Characteristics of the Old City Center

The traditional old city is the heart of the Middle Eastern city. Even though in some cases only three percent of the modern Middle Eastern urban population lives in the old city, this does not represent how important it is to understanding the social and physical structure of urban life.<sup>1</sup> While many of the unique Middle Eastern city characteristics represented in the old city are also found, in varying degrees, in other sectors, the ones that most differentiate the Middle Eastern city from other world cities are most prominent in the old city itself. Understanding the dynamics of the old city is essential to understanding the larger modern city and to understanding the Middle East in general.

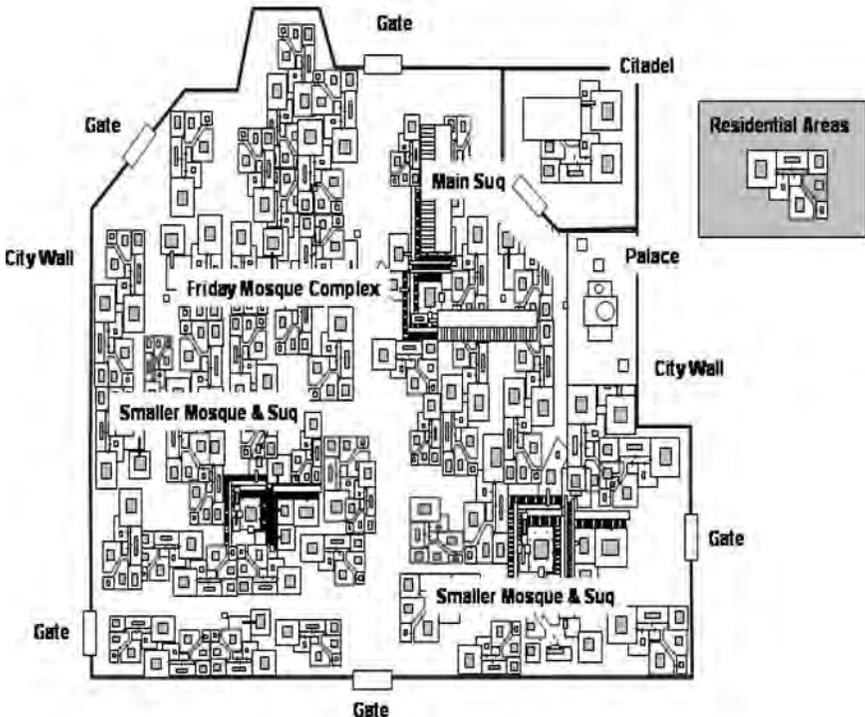


Figure 4. Main Components of the Traditional Old City

Several physical characteristics unite the traditional cities of the Middle East and are common to most cities and towns larger than a village. Though modernization has impacted Middle Eastern cities, particularly the larger

ones, some traditional characteristics can still be found, primarily in the older quarters. Common traditional characteristics (see Figure 4) such as the centrality and importance of mosques, the urban marketplace, urban residential design, and the organization of quarters are what largely make the cities of the Middle East distinct. Other characteristics of the old city (the city wall, the citadel, and the palaces) are not as common as they once were and are of diminishing importance.

Mosques and their associated welfare buildings occupy a unique social, religious, and political place in the Middle Eastern city. The mosque is not a sacred place in the same sense as a Christian church. Rather, it is a common location that facilitates joint prayer and celebration.<sup>2</sup> Some of the region's oldest and most prominent mosques are converted Christian churches since these buildings were capable of serving the mosque's primary purpose: to function as a space for communal prayer. Its size and traditional architecture make the mosque the most recognizable feature of the Middle Eastern cityscape. Still, the mosque's physical presence is not its most vital role in the Middle Eastern city; its social and political place in urban society is more crucial.



Figure 5. The Haghia Sophia Mosque in Istanbul, Turkey was originally built as a major Christian church of the Byzantine Empire in the 6th century. It was converted after the Arab conquest of the 15th century. (Photo used with permission from the Middle East Documentation Center, University of Chicago.)<sup>5</sup>

Middle Eastern cities have historically relied on the religious teachings and restraint of Islam and the Islamic community leaders, located in the mosque, to regulate society at the local level. For much of history this alleviated the need for fully developed city administrations and bureaucracy. It also facilitated totalitarian government because government behavior was only informally checked by Islamic law and by the popular power invested in the mosque's religious leadership.<sup>3</sup> A mutual accommodation between the city government and urban religious leaders is the traditional bedrock of successful Middle Eastern city government. Islam, as a religion and as a culture, sees no inherent taboo in closely integrating church and state.<sup>4</sup>

Typically, the city's Friday Mosque hosts the main Friday prayer ritual that is usually attended, and sometimes led by the political leadership of the city. It serves to reinforce the bond between the secular leadership and the population and, to an extent, to legitimize the secular leadership. Other smaller mosques, with their associated local religious leadership, serve the daily needs of local neighborhoods throughout the city and are similarly aligned with the local secular leadership, if such exists.



Figure 6. Iraqi Neighborhood Mosque  
(US Army Photo)

At the local level, the mosque's religious leadership is often the neighborhood leadership. In this manner the mosque and its associated *ulema* help bond the city's secular leadership and the neighborhood with the population, while at the same time reaffirming the *ulema's* leadership role in the neighborhood's social structure. At the national level, virtually every nation in the Middle East, with the exception of Turkey and Israel, acknowledge Islam in its constitution. Even Syria, which places little official emphasis on religion, acknowledges that "the laws of the state shall be inspired by the Shari'a."<sup>6</sup> Thus, the mosque, as the center of Islamic prayer and activity, cannot avoid involvement, direct and indirect, in the politics

of Middle Eastern cities.

The mosque's physical layout includes several standard features, though detail and architectural variations are nearly limitless. Differences in mosques are generally aesthetic and a function of local culture, building materials, climate, cost, and craft skill. Virtually no differences exist between Shi'a and Sunni mosques located within the same cultural region.<sup>7</sup> Three basic types of mosques exist: the small private sanctuary designed for individual prayer, a congregational or neighborhood mosque, and the principle Friday Mosque of a city or large community. The latter two are large, recognizable structures that generally consist of nine components.

The main part of the mosque is the area entirely devoted to prayer; it is usually divided into two parts: a covered portion called the *haram*, and the open portion called the *sahn* (Figure 7). The size of these areas varies according to the congregation the mosque is designed to accommodate. Local climatic conditions primarily determine the relative size of the two areas. In hotter climates the *sahn* would be much larger than the *haram*. The *qibla* wall (the wall of the mosque that is perpendicular to a line pointing toward Mecca) lies within the main part of the mosque. In the center of this wall is the *mihrab*, a recessed niche that marks the line from the mosque to Mecca. This niche is the focus of Islamic prayer that must be performed in the direction of the holy city of Mecca in Saudi Arabia.

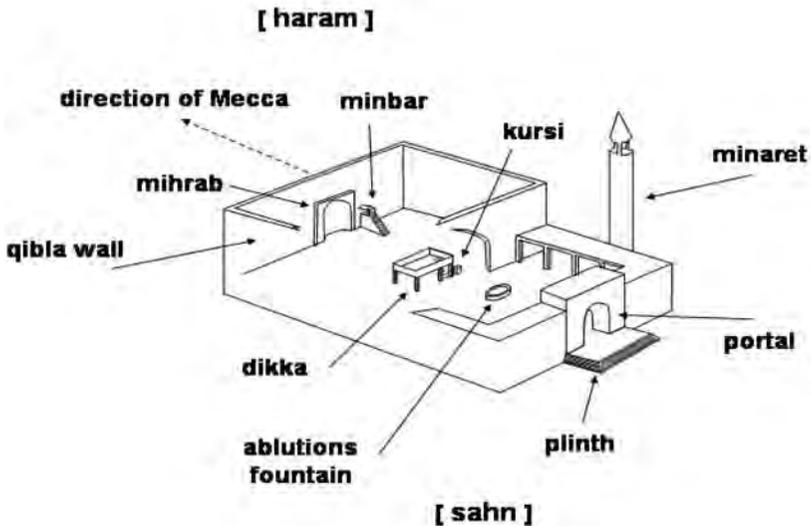


Figure 7. Standard Mosque Components<sup>8</sup>

The third feature of the mosque is the *minbar*, and it is always located to the right of the *mihrab*. The *minbar* is a raised pulpit with a staircase leading to it. It is from this raised position that the *imam* (religious leader) leads the Friday prayers. Also, the *khutba* (similar to a homily and often including social and political commentary) is delivered to the congregation from the *minbar*. Both the prayer and the *khutba* may be led by the city's secular leaders. Listening to the content of the *khutba* is a good way for a military commander to learn of the concerns and attitudes of the religious leadership and the congregation.

Directly in line with the *mihrab* is the fourth component of the mosque, the *dikka*, a raised platform reached by stairs and positioned either in the center of the *haram* or the center of the *sahn*. From this platform *qadi* (respondents) of the mosque repeat the ritual postures of the *imam* and lead the people's responses. The *qadi* serve the purpose of assisting the *imam* in leading a large congregation. Next to the *dikka* is the *kursi*, a lectern upon which the Koran is placed. The *maqsura*, a screened-off private sanctuary, is reserved for the *imam* or for a high dignitary.

The final three standard components of the mosque are located outside its closed-in portion. The ablution fountain, or pool, enables worshippers to wash before prayer. In many mosques it may only serve a decorative purpose. The *minaret* is one of the most distinctive features of the mosque; this tower is used to ensure that the voice of the prayer caller (the *muezzin*) making the call to prayer (the *adhan*) can be heard at the maximum distance. Finally, the *portal* is the single main entry into the mosque through the surrounding external walls. It marks the boundary between the bustle of the city and the tranquility of the mosque. In contrast to the mosque walls, which are typically plain, the *portal* may be ornately decorated and is a common characteristic of the mosque design.<sup>9</sup>

In Middle Eastern society, the mosque helps regulate neighborhood behavior and commerce. Islamic law still holds much authority in most Middle Eastern countries and completely dominates in some countries such as Saudi Arabia and Oman.<sup>10</sup> Though Western-based secular legal systems supersede Holy Law in most countries, the mosque is still a center for settling legal matters at the local level and within families. The mosque complex may also provide a variety of other functions, including religious schooling; medical care through a hospital or clinic; temporary lodging for the needy; a cemetery and tombs for the deceased; and welfare distribution for the poor.<sup>11</sup> Social services such as soup kitchens can be an extremely important part of the mosque's function in the neighborhood. These additional

services are often centered in a complex of welfare buildings located around the mosque. Sa’ad Eddin Ibrahim, a sociologist, estimated that in Egypt in the early 1990s as many as six million Egyptians, a tenth of the population, benefited from mosque-based social services.<sup>12</sup> Though the mosque is a single building, it may also be the center of a building complex united under the community’s religious leadership and totally integrated into the social and political fabric of that community. Commanders conducting operations in Middle Eastern cities must understand the diverse range of functions the local mosque has. Under some circumstances, these functions and capabilities may be adopted to assist commanders with the distribution of various forms of population relief.

Public baths, the well known “Turkish Baths” called *hammam* in Arabic, were traditionally associated with the mosque complexes. The purpose of the baths was twofold: they not only provided a place for the urban population to socialize, they also allowed the faithful to cleanse themselves before worship at the mosque.<sup>13</sup> *Hammam* are still quite common in Middle Eastern cities and are an important social meeting place. As such, the topics of conversation there can be an indicator of the views and attitudes of the urban population. *Hammam* are now often located within

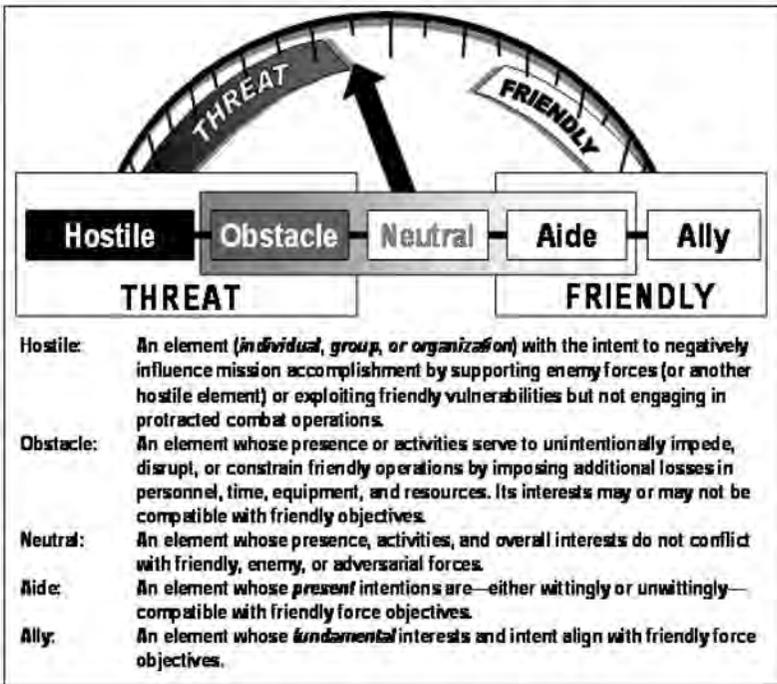


Figure 8. Continuum of Relative Interests<sup>16</sup>

the *suaq* (marketplace) and are not as closely associated with a religious purpose as they once were.<sup>14</sup>

Knowing the location and particular nature of mosques within the urban area may be critical information requirements (CCIR) for commanders. The mosque can influence all aspects of urban operations. When assessing an urban operation before its execution, commanders must attempt to identify all public mosques and their religious affiliation. The mosque's *ulema* will likely have both a political and religious leadership role in the community. Depending on the country, this role may be formal or informal.<sup>15</sup> An attempt must be made to evaluate the position of the religious leadership and determine where on the continuum of relative interest, as described both in US Army FM 3-06, *Urban Operations* and the Rand Corporation's urban intelligence primer, *Street Smart*, the mosque leadership resides (see Figure 8). Based on these assessments, commanders must then plan for how military capabilities can be applied while accounting for the mosque's presence and influence.

The mosque is often the center of urban cultural, political, and social activity. Because of this, it is often a good barometer of the attitudes and disposition of its urban population. Monitoring the mosque's activity, particularly at the Friday prayer, will enable commanders to observe the "pulse" of the urban community. Attitudes expressed in and around the mosque are a means for commanders to know the disposition of the population and *ulema* before operations and also, as importantly, the reaction of the people to changing events, circumstances, and military operations.

Military operations can be affected by mosques in numerous ways, and commanders may pursue numerous courses of actions regarding them within their area of operations. This combination of impact and responses all totally depend on the assessment done before and during the operation, as well as the nature of the mission itself. If the assessment indicates a mosque may negatively impact a mission, commanders may use shaping operations to isolate the mosque from forces conducting decisive operations. Commanders may also use shaping operations to isolate the mosque from the population if the mosque is assessed to view the military operation negatively and to likely incite civil rebellion and disruption. Shaping operations may include, but are not limited to, physically isolating the mosque.<sup>17</sup> Physically isolating the mosque has the potential for significant negative impact on the relationship between the military force and the population. It should be considered a shaping option of last resort, be related directly to a specific operational requirement, and be temporary.

Information operations will likely be a key component of the commander's approach to shaping the impact of mosques in his area of operations.

Shaping operations may also be used to leverage the mosque's cultural and political influence if the *ulema* can be convinced the military operation is advantageous to the population. During stability and support operations, it is particularly critical that commanders at all levels engage with the urban community's *ulema*. Commanders must not be inhibited by the notion that political and military matters are separate from religion. In Islamic culture political issues are inherently religious. Commanders should ensure their supporting staff includes subject matter experts on the local Islamic culture. A positive relationship with the mosque-based *ulema* provides numerous benefits to the commander conducting urban operations. Most important, it provides legitimacy in the eyes of the population. It also de-legitimizes all opposition to military operations.

Regular communication with religious leaders can be used to monitor the attitudes of the people and identify and resolve their warranted grievances. The mosque is an incredibly effective tool for communicating a positive message to the urban population, as well as to informal tribal and clan leaders. Commanders, or their representatives, should visit the major mosques in their area of operations. Non-Muslims are generally welcome at mosques but should avoid visiting during prayer hours. Smaller mosques may be unaccustomed to visitors. Shoes are always removed before entering and dress must be conservative and cover the body (shorts should not be worn). Women may be required to wear a headscarf.<sup>18</sup>

The mosque can also be an effective means of coordinating and distributing needed aid, medical support, and food to the people by using the mosque's welfare system. Turning the food over to the local *ulema* could facilitate food distribution, while health services might be administered at and in cooperation with a mosque-sponsored clinic. In Middle Eastern urban culture, the value of close and positive relations through the local mosque and the Friday Mosque cannot be underestimated. The difficulty of establishing such a relationship, though, in the face of suspicion, cultural ignorance, language barriers, and the stress of military operations, cannot be overstated.

An urban adversary, when engaging in decisive operations, is likely to take advantage of the mosque's cultural and political sensitivity to limit or inhibit commanders' use of their combat resources against the enemy. Mosques may be occupied and used as defensive positions or ambush

positions. They also may be used as storage areas for caches of supplies. It is possible that an adversary will use them as a sanctuary for command-and-control operations and for key leaders. When war gaming potential courses of action during the formal planning process, commanders should consider the variety of ways an enemy may seek to use the mosque to his advantage.

As Article 27 of the *Laws and Customs of War on Land* (Hague IV, 1907) dictates, commanders must not hesitate to conduct decisive operations in and around mosques being used, by the enemy, for military purposes. If possible, commanders should pre-empt the adversary's ability to use the mosque by quickly denying access to it either by securing it first or by intercepting the enemy before enemy forces can secure it. If the enemy successfully positions forces in or around a mosque, commanders must be very precise in their application of combat power to destroy the enemy. If available, special operations forces may be an appropriate force to use in such a situation. Alternately, commanders should use precisely applied force to achieve specifically defined effects. Snipers are an example of a conventional tactical capability that can be very discriminately applied. In addition, emphasis should be placed on using precision and guided munitions. No-fire zones can be used as a control measure to assist the commander controlling how combat power is applied in and around mosques. Negotiating an adversary's surrender should also be considered when the enemy occupies a mosque. In such a case, the local *ulema* may be helpful as possible intermediaries.

Second only to the mosque in terms of social importance within the Middle Eastern city, and of premier economic importance, is the marketplace, bazaar, or *suq*. This economic side of the city has its own associated population. Often referred to as the bazaar class, this group consists of the more powerful merchants and entrepreneurs and the people who work for them.<sup>19</sup> As a class, they can be quite conservative and traditionally have a strong association with the *ulema*.<sup>20</sup> Author and journalist Elaine Sciolino, in her recent book on post-revolutionary Iran, *Persian Mirrors*, labels the influential urban class of merchants as the "Bazaari" and indicates that their financial sway was instrumental in helping the clerics who overthrew the Shah in 1979.<sup>21</sup>

The *suq*'s importance lies not just in sustaining the urban population but also in trade, one of the primary functions of the Middle Eastern city. As previously mentioned, trade routes historically dictated the location of the city. Today, the marketplace is also a center of social activity among the

city's citizens. In recognition of its importance, a city's main marketplace is typically located in close vicinity or even next to the Friday Mosque. Many mosques operate booths in the *suq* as one means of funding religious activities and facilities. Over the centuries, the city marketplace has evolved from temporary vender booths located on the primary pedestrian traffic ways into permanent craft shops along those same high-traffic routes and the alleys located near them. Over time, some of the alleys containing these shops have been permanently covered, becoming comfortable and elaborate indoor markets. In Iran, the traditional bazaar is almost always covered and often the primary alley is constructed below the normal street level. Both features are designed to keep the bazaar much cooler than the outside temperature.<sup>22</sup>



Figure 9. Local Marketplace, Iraq. Note the tarps spanning the street to provide protection from the weather (US Army Photo).

The shops of the *suq* are small enclaves that appear carved into the walls of the market's streets and alleys (Figure 9). Some of the wares spill into the street. A larger establishment, known as a caravanserai, supports these small shops. The caravanserai, called *khan* in most countries, serves as a support structure for the *suq* and is usually rather large, two or three stories high, and may include a courtyard; it provides storage space for the *suq* shops, office space, and may also rent rooms and apartments on its upper floors. They often are the "meshes in the grid of the *suq*, being

located right behind the lines of shops, with only the entry projecting into the front row of *suq* shops. The entry gate of major *khans* may be connected with a dome covering the alleyway in front of it, which [leads] to the formation of strategic nodes punctuating the *suq* network.”<sup>23</sup> A final characteristic of some market areas is the ability of a supervising guild of venders or city officials to deny access to the market at a specified time by closing and locking gates across the streets and alley entrances.

A hierarchy of venders and merchandise exists within the *suq*. The *suq* is generally segregated by product. Shops selling more expensive and more desired items such as jewels, perfume, silks, and spices are located closer to the mosque and in the covered areas. More mundane items such as fruits and other foodstuffs would be located on the fringes of the marketplace.<sup>24</sup> Smaller marketplaces may be found in various parts of the city serving the daily needs of neighborhoods. Larger cities can have several large *suqs*. Specialized markets dominated by one particular type of product and serviced by one particular guild of craftsman, such as coppersmiths, may be found in separate areas of the city.

It is not reasonable to expect that *suqs* will continue to operate during combat operations. However, reestablishing and securing the market centers has to be a commander’s critical objective when transitioning to stability and support operations. *Suqs* are the life-support of the urban population and they are integral to the urban economy. Thus, they are vital to stabilizing the Middle Eastern city after conflict. Creating conditions for the *suq* to operate generates a positive perception of military forces among the important urban business class. *Suqs* are also a social network that can help in the monitoring of the attitudes and perceptions of the civil population. Permitting *suqs* to operate, though, will not automatically restore the local economy or provide needed essentials to the population. Commanders must remember that most Middle Eastern countries and cities within countries are net importers of basic food needs. For the *suqs* to be effective, commanders must ensure they are open and have access to their traditional trading partners and sources.

Residential buildings are another important component of the traditional Middle Eastern city. According to those who believe in the dominance of Islam in urban life, the Koran had a dual influence on the design of homes: it encouraged inner privacy and the solidarity and unity of the family and neighborhood.<sup>25</sup> In residential design, Islam’s impact is represented by the courtyard home, which emphasizes privacy while also accommodating the inclusiveness of a large family. Several courtyard house styles exist in the

Middle East, an Egyptian (Figure 10), a Saudi Arabian, a Syrian, and an Iraqi style.

The Saudi Arabian home is typically two or three stories high and formed around an open courtyard; it is often very small and sometimes no



Figure 10. Old City Alley, Cairo. Courtyard homes flank both sides of the alley. It is not uncommon for upper floors to extend over the alley. (Photo used with permission from the Middle East Documentation Center, University of Chicago.)

larger than an open ventilation shaft (See Figure 11). This home design uses shade and airflow to regulate temperature. The rooms of the house have independent access to the courtyard from various directions. In fact, the rooms can be separate apartments housing different groups of a large family. Separate female areas that may have hidden observation windows

to the male reception areas (usually screened or tinted and above the lower male room) also characterize these houses. The courtyard house is the most common traditional residential style in the Middle East.<sup>26</sup>

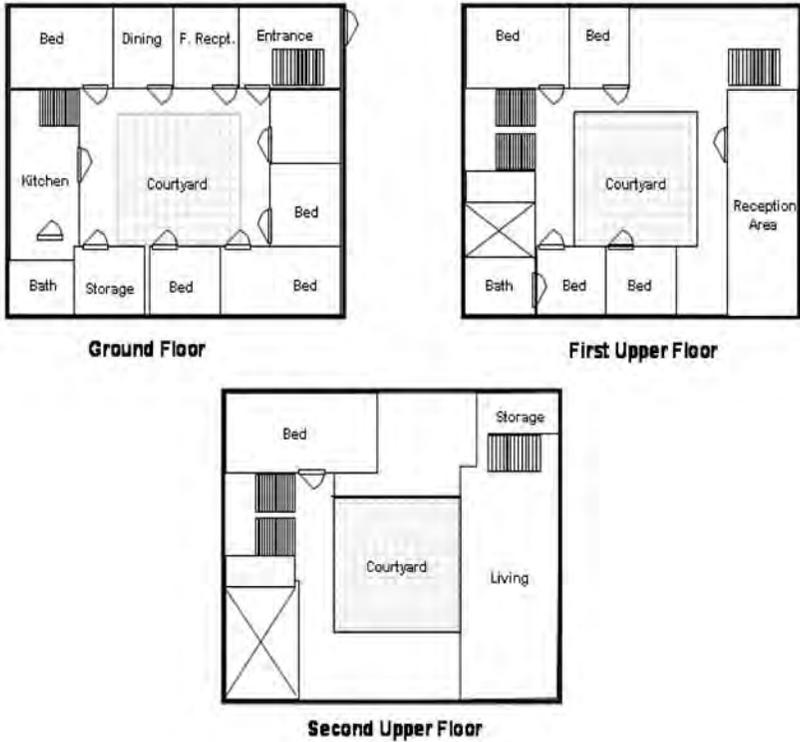


Figure 11. Layout of Saudi Arabian Courtyard Home <sup>27</sup>

The Syrian courtyard home has a more complex and irregular design than others (see Figures 12 and 13). The courtyard may be an irregular shape and the house may have irregular elevations in the interior. It may contain formal and informal open reception areas called *qu'a*, flanked by raised sub-rooms called *iwān* that may also be integrated into the design of larger courtyards, providing a covered outside reception area. Frequently, a domed ceiling covers the *qu'a*.<sup>28</sup> Egypt's courtyard home design adjusted to the hotter, more humid climate by creating upper-floor interior and exterior walls that are heavily screened with wood lattice, instead of solid walls, to allow air circulation. In addition, many Egyptian-style homes have rooftop wind catchers that redirect breezes into the inside of the homes.<sup>29</sup> This is also a feature of Iranian-style courtyard homes.<sup>30</sup>

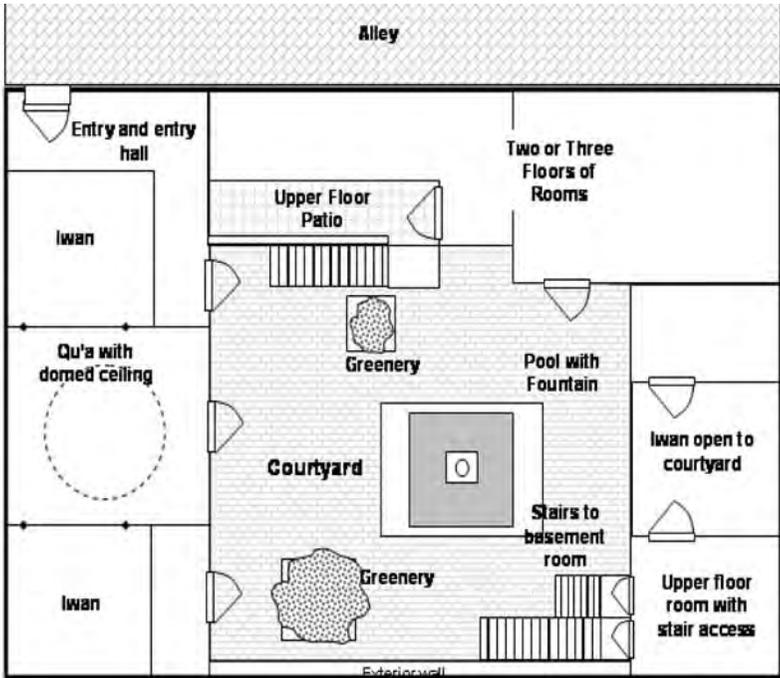
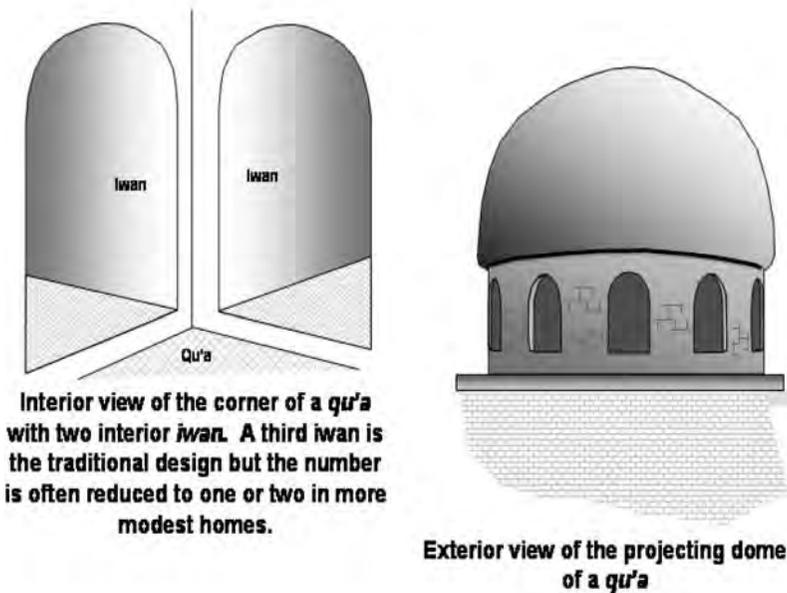


Figure 12. Layout of Syrian Courtyard Home<sup>31</sup>



**Interior view of the corner of a *qur'a* with two interior *iwan*. A third *iwan* is the traditional design but the number is often reduced to one or two in more modest homes.**

**Exterior view of the projecting dome of a *qur'a***

Figure 13. Details of Syrian Courtyard Home

Iraq's courtyard home has a more symmetric layout than some of the other styles but can still be quite complex (Figure 14). The Iraqi-style home typically makes use of a feature called a *tarma*, an elevated colonnade that may run along one or more sides of the courtyard. It is often combined with *iwan*-like recesses, lateral bays, or closed reception rooms.<sup>32</sup>

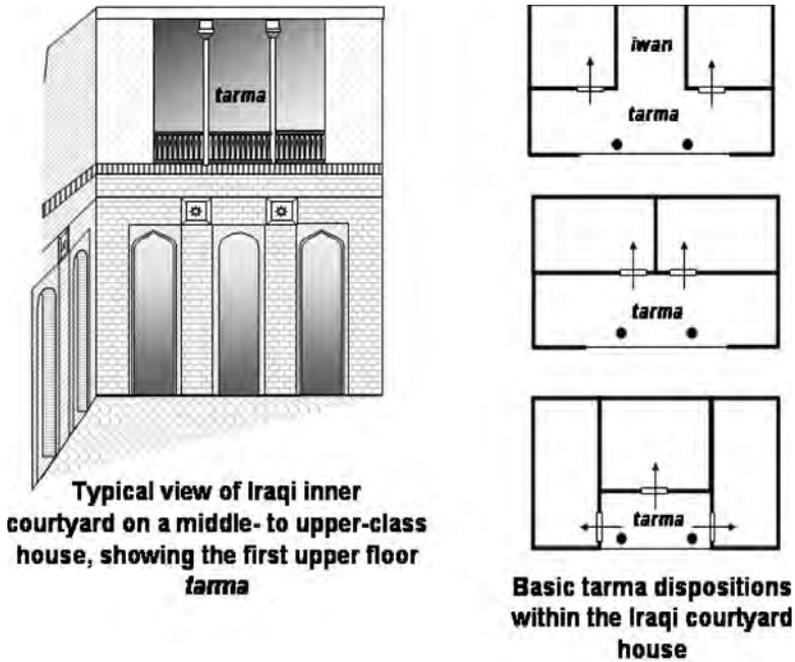


Figure 14. Details of Iraqi Courtyard Home<sup>33</sup>

Another unique type of house found in parts of the Middle East is the South Arabian tower house that is common in Yemen and the Saudi cities of Jeddah and Mecca. This house design evolved from a rural design that transformed a fortified tower concept into an urban residence where the towers (four or five stories high) are abutted against each other in rows. Urban tower homes grouped together resemble Western townhouses. Although the tower house does not have a courtyard, it has many of the room features that are found in courtyard homes and the same emphasis on privacy. The tower homes and courtyard homes are traditional Middle Eastern designs found in the older, urban, residential areas. More recent neighborhoods feature Western-style apartments for the middle- and lower-middle-class urban population, and shanty constructs for the urban poor. These will be discussed in greater detail in a subsequent chapter.

Traditional residence design is militarily significant because it fundamentally differs from the outwardly focused Western design Americans know. This can dramatically change the TTP at the lowest tactical levels for those charged with attacking, defending, seizing, or searching these types of residences. Courtyard houses and tower homes are no longer the norm in the Middle Eastern city. However, they are still common in the old core and colonial city areas (see Figure 3) and in smaller cities and towns. It is estimated that in Riyadh, one of the most modern of all Middle Eastern cities, over 4,000 of these traditional dwellings remain (down from over 40,000 in 1990).<sup>34</sup> In addition, many modern regional designs have incorporated features from the traditional courtyard home, particularly the courtyard itself.



Figure 15. Patrolling Through an Iraqi Neighborhood. The middle-class homes, though not traditional courtyard homes, have many of the same characteristics: no windows, private unadorned doorways and exterior walls, two floors with flat roofs, and interior courtyards. A major difference is the widened alleyway that permits modern vehicle traffic (US Army photo).

These types of traditional residences differ enough from the modern Western residential designs (also found in the Middle Eastern city) to warrant assessing the particular operational area's residential design and then adjusting and developing TTP as necessary. A mixture of Western and traditional residence design often coexists in the same area of operations. It

must also be noted that one of the customs associated with all residences is that no person enters uninvited. This is a practice reinforced by Holy Law.<sup>35</sup> Commanders should understand that their attempts to accommodate this custom will help legitimize their operation in the eyes of the civilian population.

An important and final characteristic of traditional Middle Eastern city design is the organization of quarters. Quarters are informally organized residential neighborhoods. They are a sub-component of the old city center. Most Middle Eastern cities are informally but highly segregated. Neighborhoods organize themselves into homogeneous sections according to one of a variety of factors: religion, ethnicity, occupation, tribal affiliation, regional affiliation, and economic status.<sup>36</sup>

Where the Middle Eastern city is located and its local, regional, and national history shape the variety of neighborhoods found there. Religion is clearly the most obvious way the population segregates itself. Most Middle Eastern cities outside of southern Arabia have small Christian and, in some cases Jewish, minorities. Islamic law protects these minorities and they congregate in their own quarters that usually include state-sanctioned and -controlled churches and synagogues. Quarters also segregate according to forms of Islam, with the division between Shi'ite and Sunni factions being the most obvious demarcation. Some quarters are based on regional, village, or tribal affiliation. Residents in these quarters share a common family, geographic, and tribal origin outside the urban area. Quarters organized in this manner often facilitate the integration of rural-to-city immigrants, and they may also be organized according to vocation. This can take both a modern and traditional form. Whereas the traditional one is organized according to a craft skill and usually a corresponding guild affiliation, such as coppersmiths, the modern manifestation is a neighborhood made up of workers in a particular local, industrial project.

Physically, though variations are numerous, some patterns emerge in how quarters are organized (see Figure 16). The center of the quarter is the local mosque. Associated with the mosque is a group of auxiliary and welfare buildings that may include a bathhouse, *madrassa*, hospital or clinic, soup kitchen for the poor, and cemetery. Also in close proximity to the mosque is a *suq* that may be very small, serving only the daily needs of the quarter, or may be larger and draw customers from other parts of the city. The larger caravanserai supports the vending booths of the *suq*. The mosque and *suq* will be located in an area that is relatively accessible both from within the quarter and from other areas of the city. Beyond the

centrally located mosque/*sug* area are the residential areas of the quarter. A large mosque may be located in a position where it can serve several quarters.

The residential portions of the quarter are concerned with privacy, and these areas are divided into numerous narrow alleys and cul-de-sacs. Residents of these alleys and cul-de-sacs usually share an affiliation, often a subset of the larger quarter population characteristics. For example, the residents of a quarter may be defined by a particular tribal or regional affiliation, while all the residents on a particular alley may have a common

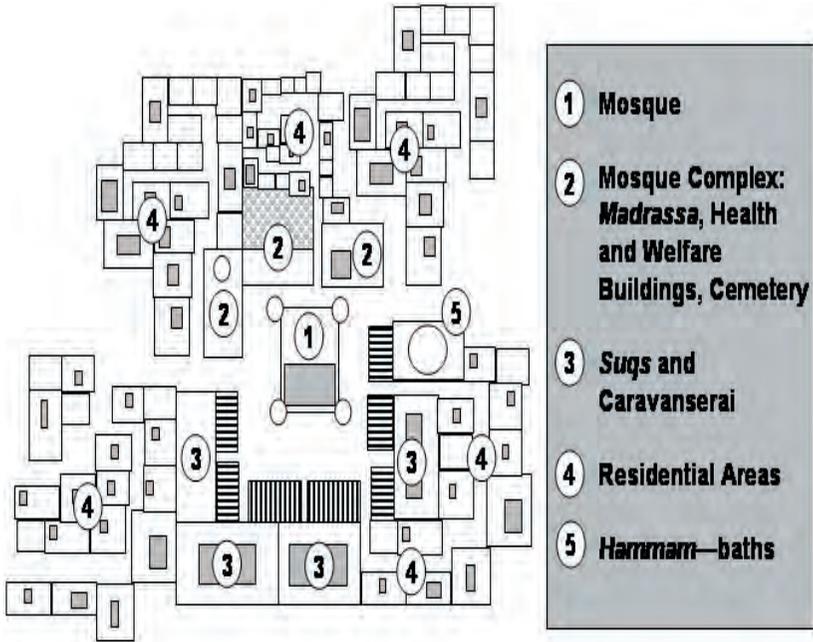


Figure 16. Major Components of a Residential Quarter

origin from one village within the region. In some cases, residents of a cul-de-sac may all be members of an extended family. Some alleyway entrances into sectors of the quarter may also be controlled by access gates that only residents' keys open. These may be closed at specified times to enhance the privacy and security of the residents.<sup>37</sup>

Understanding the nature of the quarter in the urban area of operations is critical to organizing for, planning, and executing urban operations in the traditional Middle Eastern city. Assessing residential quarters is an essential information-gathering requirement before the start of military

operations, and monitoring the urban population remains a key assessment task throughout their duration. The physical nature of residential neighborhoods benefits both the defender and the attacker and must also prompt consideration of specific TTP and the employment of a variety of weapons systems and other capabilities.

Assessment of traditional residential quarters has to be a full-spectrum assessment focused on gaining a complete understanding of the urban triad: physical structure, infrastructure, and society within the quarter. This process is outlined in FM 3-06.<sup>38</sup> One of the biggest challenges soldiers will face in a maze like the traditional Middle Eastern quarter will be navigation. Because of this, a major element of the area's physical assessment has to be apportioned to mapping. This is likely best done through standardized large-scale aerial photos. GPS-assisted navigation is not entirely effective because navigation is time-sensitive and because errors of only a couple of meters can be significant. Aerial mapping, accompanied by a standardized building numbering system and training in mounted and dismounted urban navigation, has been effectively used by the Israeli Army in recent operations in the traditionally designed small towns and cities of the occupied West Bank.<sup>39</sup>

A physical assessment of the quarter should also identify whether a residential structure is a modern apartment or a traditional courtyard home. This permits units to develop and train in squad and platoon TTP based on the particular type of structure they will encounter in operations. A modern apartment building will be approached at the micro-tactical level in a completely different manner than a traditional courtyard home. Much of the assessment process used to understand the demographics of the Middle Eastern traditional quarter, its urban area, or infrastructure will not fundamentally differ from the assessment of any other type of city. One key consideration that might be much different, and is important for military stability and support operations, is population density. Because of urban growth and rural-to-urban migration, population densities may vary greatly across a Middle Eastern city. Commanders should focus their urban, residential assessment capabilities on the demographics of residences. Key questions that commanders should task to their assessment staffs are how many people are physically housed in an individual residence and what is the relationship between people housed within residences (are they strangers? family members? members of the same tribe?).

The physical design of the traditional Middle Eastern city quarter, as previously described, reveals specific advantages and disadvantages to

attackers and defenders. Advantages for attackers are somewhat limited, as is the case with all urban environments. One possible advantage, however, is the capability under the right circumstances to isolate traditional city quarters. Residential neighborhoods are relatively easy to isolate due to the privacy of residence design and the private access into quarters. The characteristics making residential areas difficult to enter with force make isolating specific objectives from reinforcement and preventing the escape of targeted enemy forces easier. They can also permit fairly effective population-control techniques by using well-placed checkpoints. Using the quarter in such a way is particularly effective in counterinsurgency operations. These advantages are inversely disadvantages for defending forces or insurgents operating in the traditional quarter; however, commanders should be aware of the capability of prepared adversaries to create and use subterranean routes between residences, alleys, and around access-control points and other barriers.

For defensive purposes, the design of the traditional quarter offers several advantages, the first being the effect of canalizing an enemy approach into the quarter. No matter how large the attacking force may be, only a limited amount of force can move through the quarter effectively. Thus, a well-positioned small force can halt the advance of a numerically superior force. Also, the narrowness of the typical quarter's streets significantly limits movement of large pieces of equipment, including vehicles and armor. Many quarters may be only accessible dismounted. The width of the typical quarter, alley, or street also enables excellent concealment, including the concealment of forces moving to adjust positions or to reinforce. In the West Bank occupied territory, Palestinian forces have stretched tarps between buildings to allow for unobserved movement of forces.<sup>40</sup> This tactic significantly decreases the utility of many sensors including remotely piloted vehicles (RPVs). Well-positioned snipers and the use of obstacles such as mines and improvised explosive devices (IEDs) can make mounted and especially dismounted movement through the quarter's streets and alleys extremely hazardous.

Again, the recent Israeli experience in the occupied territories suggests some potentially effective offensive TTP. One technique employed by the Israeli Defense Forces (IDF) is to maximize mounted movement within the urban residential quarter. This technique is used to execute raids. It provides speed; support of armored weapon systems and sights; and, most important, armored protection from small-arms fire, anti-personnel mines, and IEDs. The major disadvantage of this technique in the traditional urban

setting is that many residential quarters do not have streets wide enough to permit mounted operations.

One solution to this problem used by the IDF is the armored D10 Bulldozer; they use this piece of equipment to create avenues of approach deep into the traditional quarters of the small cities and towns in which they conduct operations. This permits mounted armored movement directly to specific point objectives. The dozer's capabilities include the ability to detonate anti-personnel munitions with impunity.<sup>41</sup> The dozers can be used to build these avenues as a contingency for future operations, as well as during the conduct of operations. A major disadvantage of this technique is the enormous amount of collateral damage that occurs and the associated negative effects on the military force's relationship with the population. Employment of the bulldozer is also a slow process that usually requires daylight; thus, it is not compatible with raids that depend on speed, surprise, and limited visibility for success. It is more compatible with a deliberate attack deep into a dense urban district. It also may be used as part of a long-term effort to permanently change the urban landscape and make the conduct of future offensive military operations easier.

An alternative to ground movement is air movement to and from the objective. The effectiveness of this technique is very dependant on the man-portable air defense (MANPADS) threat in the area of operations. However, under the right conditions this technique can provide speed and surprise. It has been used effectively in dense urban areas by the French in Algiers in the 1950s and by the United States in urban operations in Vietnam, Panama, and Somalia. Many Middle Eastern residences have easy roof access and the courtyard home pattern sometimes includes rooftop patios. This design feature facilitates use of air assault techniques under the right conditions.

The traditional city core, though relatively small physically, is still a key component in the structure of the Middle Eastern city. It is often the center of the urban population's religious and, by association, political focus. Many of the important mosques and associated facilities, as well as the *ulema*, are located here. Because of this, military forces must be able to effectively operate in this area. Its quarters' and residences' unique designs may pose significant challenges to military operations that must be accounted for by commanders and their staffs. However, effective operations within the old Islamic city center are possible if commanders and soldiers understand the area's physical characteristics and social dynamics. Successful operations

in the old city contribute at a high rate of return to overall success in the modernizing city that surrounds it.

## Notes

1. Brunn, 2003, 270.
2. Bernard Lewis, *What Went Wrong?* (New York: Oxford University Press, 2002), 98.
3. Bianca, 2000, 28.
4. Martin Frishman and Hasan-Uddin Khan, eds. *The Mosque: History, Architectural Development and Regional Diversity* (New York: Thames and Hudson, 1994), 37.
5. Nick Inman, ed., *Eyewitness Travel Guides: Istanbul* (New York: Dorling Kindersley Publishing, Inc., 1998), 72-73.
6. Lewis, *What Went Wrong?*, 108.
7. Frishman, 41.
8. This figure is based on a drawing in Frishman, 33.
9. The description of the mosque's components in the preceding paragraphs is from Frishman, 33-40.
10. Farah, 164.
11. Bianca, 103-116.
12. Miller, 56.
13. Bianca, 115.
14. Andrew Beattie, Andrew and Timothy Pepper, *A Rough Guide to Syria* (London: Penguin Books Ltd., 2001), 51.
15. In some Middle Eastern countries the *ulema* are strictly controlled and licensed through the government. In other countries religious leaders and their associated mosque complexes are private operations and funded completely through donations. A third case is a combination of the two. Often in this latter case the sanctioned *ulema* and the privately funded *ulema* are rivals.
16. US Army, FM 3-06, *Urban Operations* (Washington, DC: Government Printing Office, 2003), describes a variety of means for isolating an urban area or a segment of the urban area. These means include physical isolation, isolation through fires, electronic isolation, and psychological isolation. FM 3-06, 5-3, 5-4.
17. This diagram is from US Army, FM 3-06, *Urban Operations* (Washington DC: Government Printing, 2003), B-13. It is also discussed in Russell W. Glenn's and Jamison Jo Medby's *Street Smart: Intelligence Preparation of the Battlefield for Urban Operations* (Santa Monica, CA: Rand Corporation, 2002), 99.
18. Beattie, 45 and Richardson, 66.
19. G.H. Blake and R.I. Lawless, eds., *The Changing Middle Eastern City*,

“The Evolution of Retailing Patterns” by V.F. Costello (London: Croom Helm, 1980), 143.

20. Masoud Kheirabadi, *Iranian Cities: Formation and Development* (Austin, TX: University of Texas Press, 1991), 60.

21. Elaine Sciolino, *Persian Mirrors: The Elusive Face of Iran* (New York: Touchstone Book, 2000), 53.

22. Kheirabadi, 50-51.

23. Bianca, 128.

24. *Ibid.*, 118-132.

25. *Ibid.*, 53-54.

26. *Ibid.*, 77-78.

27. Based on drawings in Jamel A. Akbar, “Courtyard Houses: A Case Study from Riyadh, Saudi Arabia,” in Ismail Serageldin and Samir El-Sadek, eds., *The Arab City: Its Character and Islamic Cultural Heritage* (Riyadh, Saudi Arabia: Arab Urban Development Institute, 1982), 164.

28. Bianca, 66.

29. Bianca, 89-91.

30. Kheirabadi, 36-39.

31. This diagram is based on a sketch and description in Bianca, 86-88.

32. Bianca, 91.

33. This figure is based on sketches and diagrams in Bianca, 92.

34. Nada Al-Nafea’ and Rosie Llewellyn-Jones, “Riyadh’s Vanishing Courtyard Houses” *Asian Affairs*. 28, no. 3 (October 1997): 335.

35. *Ibid.*, 335.

36. G.H. Blake and R.I. Lawless, eds., *The Changing Middle Eastern City*, “Quarters and Ethnicity” by T.H. Greenshields (London: Croom Helm, 1980), 120-122.

37. This description of how quarters are organized comes from a compilation of information from T.H. Greenshields’ article “Quarters and Ethnicity,” in Blake, 120-140 and Bianca’s description in his “Chapter 7: The Deep Structure of the Traditional Urban Fabric,” 137-158.

38. Appendix A of FM 3-06 provides a detailed outline for an urban assessment based on the Army’s intelligence preparation of the battlefield (IPB) process. FM 3-06, A1-A12.

39. Interviews with Israeli Army officers, January 2003.

40. *Ibid.*

41. *Ibid.*

## **Chapter 4**

### **Changes: Transition to the Modern City**

Many Middle Eastern cities have undergone dramatic transformation since World War II, particularly since the 1980s. In some cities the old city no longer exists. In others, formerly prominent features of the traditional city no longer perform the function for which they were initially designed. The transformation of the Middle Eastern city is largely the product of either one or both of two simultaneously consequential phenomena: population growth and modernization. These two phenomena have reshaped the Middle Eastern urban cityscape and, in some cases, totally obliterated the physical presence of the traditional Islamic city center.

Though understanding the traditional city and its influence is still important to achieving a complete regional awareness, in three of the region's capitals the traditional city has either been destroyed or never even existed. Amman, the capital of Jordan and the major urban area on the Jordan River's east bank, is essentially a product of post-World War II history. Amman has ancient roots but was of no particular importance until 1921 when Amir Abdullah ibn Hussein established it as the capital of Transjordan.<sup>1</sup> At the time, the city population was estimated at around 5,000 inhabitants. By 1991 more than 1.25 million residents lived in Amman. Now, it is one of the most important cities in the region. But because of its late development, Amman never established an important old city as is common in most urban areas of the region.<sup>2</sup>

Radical modernization has also killed some old city cores. Unprecedented prosperity from the oil industry permitted governments to modernize some cities on a massive scale. In Kuwait City, modernization resulted in the bulldozing of its old city walls in 1957. Virtually nothing remains of the old city except for the reconstructed city gates.<sup>3</sup> B.D. Clark quotes George Shiber, an urban geographer, while describing these forces at work in Kuwait City and their effects:

“The impact of revenue on urban landscapes has been meteoric, radical, ruthless. It has all but obliterated in one hectic decade nearly all physical and social landmarks of the past.” The old city has been virtually destroyed or changed out of all recognition.<sup>4</sup>

The destruction of Baghdad's old city is also a result of petroleum-funded

modernization, though the process began much earlier when the Ottoman Turks tore down the city walls in 1869. Baghdad's modernization process accelerated in the 1950s with the gradual addition of numerous, multi-lane vehicular roads. Stephano Bianca explains how the modernization process culminated in the early 1980s:

President Saddam Hussein decided to cut the Gordian Knot, as it were, by launching an ambitious large-scale urban renewal program, which was intended to totally reshape the appearance of Baghdad within three years by implementing a number of monumental projects on both sides of the Tigris.<sup>5</sup>

Baghdad's modernization was not completed due to the series of wars initiated by Saddam Hussein's regime. However, though remnants of street patterns and traditional homes remain, enough of the project was finished to destroy the integrity of the old city.

Destruction of the Middle East's old city has taken away its visibility as the center of tradition and religious power. That power is not eliminated however; like the inner city population, it has simply migrated. In most cases, that power has followed the population into the middle- and lower-scale government housing projects and into the shantytowns. In these areas the mosques and *madrassa*, though usually not as architecturally magnificent as the common old city historic structures, continue to be the nexus of religious power, local leadership and, in many cases, radical political opposition.

Traditional aspects of the city have survived in some areas, but their importance and function has changed significantly as is the case with the *hammam* discussed in Chapter 3. Two other traditional city elements that have dramatically changed are the palaces and city defensive works. Palaces and royal residences at one time were a fixture of the traditional Middle Eastern city core. Many of the old palaces and residences still exist, but they have lost most, if not all, of their political and symbolic importance. Many have been converted into historic sites or museums. The military significance of these locations may simply be the requirement to safeguard the cultural treasures and artifacts they contain.

Some modern Middle Eastern leaders have erected contemporary palace residences in the capitals and many of the region's secondary cities. Unlike the traditional palaces, these new residences generally reside

outside the city core, typically in an urbanized suburb or a suburb devoted exclusively to government functions. These modern palaces can be quite large, contemporary, opulent, and can include numerous parks, significant underground facilities, and significant support complexes. The Canadian Broadcast Corporation described the 78 Iraqi palaces built under Saddam Hussein as follows:

The palaces are noted for being massive in scale and some are said to rival the world's greatest in terms of opulence. In a 1999 document entitled "Saddam Hussein's Iraq," the U.S. Department of State reported some of the finer details of what it referred to as "Saddam's monuments to his glory."

[The document] told of gold-plated fixtures, acres of European marble and crystal chandeliers that festoon the palaces, many of which are larger in size than Britain's Buckingham Palace. The grounds outside contain heavily irrigated gardens, clusters of pools, manmade lakes, waterfalls and fish aquariums—all this in a brutally hot, arid desert climate.

In many cases, Saddam's palaces serve more than one purpose: official residences, military compounds, government office, resort-like villas, farms and VIP housing. The United Nations has even identified eight palaces as potential weapons of mass destruction [locations] and subjected them to inspections similar to those normally reserved for chemical laboratories and munitions factories.<sup>6</sup>

Iraq is not the only Middle Eastern country where palaces and official residences are a conspicuous part of the urban landscape—both Syria and Saudi Arabia have comparable residences in or near their capital cities. Iraq, though, may be the only country to have developed such multi-functional complexes.

Determining the location, design, and function of official government residences is key planning information at both the operational and tactical

levels of war. Palaces must be carefully assessed to see if they warrant identification as an operational-level decisive point. In addition to being a potential location of military and political leadership, these massive complexes may also contain sensitive intelligence information, command-and-control facilities, and facilities to store or manufacture weapons of mass destruction. At the tactical level, the size of the residence and the likelihood of significant defenses require careful shaping of the battle space, deliberate planning and preparation, and swift and decisive application of combat power. Tactical operations against such complexes may be optimized by the integration or close synchronization of special operations forces and conventional military capabilities. Commanders should ensure they have detailed plans and expertise available to exploit these facilities once they are captured.

Through the 19th century, virtually every significant Middle Eastern city invested heavily in military fortification (city defensive works), typically taking the form of commanding citadels and encircling defensive walls. The rise of modern weaponry led to the demise of the fortified city, however, at the close of the 19th century.<sup>7</sup> Many of these citadels remain in place as tourist attractions or have been converted to other uses. City walls, in particular, are still prominent in cities such as Istanbul, Turkey; Damascus, Syria; and Jerusalem, Israel; while citadels are dominant features in cities such as Aleppo, Syria; and Cairo, Egypt. Many small- and mid-size cities also contain remnants of these military constructs. In contrast, some cities that have undergone extensive modernization, such as Baghdad and Kuwait City, contain no fortification remains. Where these ancient fortifications still exist they can pose significant tactical obstacles to forces engaged in urban combat, as the IDF discovered attacking the old city part of Jerusalem in June 1967:

At 9:45 A.M., Sherman tanks fired point-blank at the twelve-meter high Lions Gate, destroying a bus that had been positioned to block it, and blasted open the door. Then, led by a half-track commanded by Capt. Yoram Zammush, an observant Jew whom Gur had promised would be the first to reach the Western Wall, the Israelis charged. Jordanian gunners shot from the walls and from rooftops around the square inside the gate, but the assault was overwhelming.<sup>8</sup>

Though ancient fortifications can be overcome by modern firepower,

the previous example illustrates they can be significant tactical obstacles needing deliberate planning to overcome. At the lowest tactical level, breaching such an obstacle is similar to breaching any deliberate obstacle: synchronization of combat power, leadership, and soldier courage are required to achieve success.

Modernization and population growth have also added new elements to the structure of Middle Eastern cities. The colonial sector of the city is typically a transitional point. Beyond that point, new features dominate the cityscape like the modern central business district (CBD), middle-class and upper-class suburbs, lower-class residential complexes, industrial centers, airports and associated traffic infrastructure, and immigrant and migrant shantytowns. These new elements are post-World War II; many originated during the petroleum industry's peak in the 1960s or during the urban population explosion of the 1980s.

The heart of the large, new Middle Eastern city is the modern CBD, which is the center of business, banking, and government. Generally, the CBD in most large cities traces its origin to colonial times. Consider these two descriptions of the modern districts of Damascus and Cairo as extreme but not untypical:

In many ways it's difficult to like the New City [section of Damascus]. Noisy and often frantically busy and blighted in many places by ongoing construction work and ugly concrete freeways, it has none of the Old City's charm, history, forgotten corners, ancient mosques and quiet back streets. But the New City, which began life in colonial days, is where Damascus actually happens; at its heart is the commercial, governmental, and diplomatic hub of the capital. New suburbs are being added all the time as the city grows remorselessly, fed by Syria's high birth rate and migration from the countryside. Workers pour into the New City every day, creating nightmare traffic which, when not gridlocked, absolutely tears along, horns constantly blaring, making crossing the road something of a developed skill (it's interesting watching the locals do it with

consummate ease).<sup>9</sup>

Beyond the sanctuary of the luxury hotels beside the Nile, crowds and traffic jostle for space in the fume laden air; whistling cops direct weaving taxis and limousines, donkey carts and buses; office workers rub shoulders with baladi folk, Nubians and soldiers. The pavements and shadowy lobbies of cavernous Art Deco or Empire style apartment buildings are a lifetime's world for many vendors and doormen—both major contributors to Cairo's grapevine. Above the crumbling pediments and hoardings, pigeon lofts and extra rooms spread across the rooftops—a spacious alternative to the streets below, forming a city above the city center.<sup>10</sup>

As seen in these descriptions, compact living space, high energy, and a high density of people mark the CBD as the heart of the city's economy and secular governing institutions. Military challenges generated by this part of the city are no less imposing than those found in the more traditional quarters; they are also more typical of urban environments found in large cities throughout the world, particularly in developing countries. Thus, the modern characteristics of the city, though important, are not necessarily unique to the Middle East.



Figure 17. Modern Cairo (Department of Defense Photo)

Other modern additions to Middle Eastern urban areas include new traffic capabilities such as broad highways, city avenues, and airports. Industrial parks located on the fringes of the city are also a product of economic progress. Suburbs or satellite cities have resulted from both modernization and the need to expand residential living beyond what the traditional city can accommodate. In many ways, without diminishing the inherent difficulties of high intensity urban operations, modernity has reduced some of the more difficult challenges Middle Eastern urban operations pose in the old city. Broad avenues and symmetric grid patterns facilitate easier access into the city, easier navigation, and better control of modern military forces. This redesign of city structure enables rapid “thunder runs” by military forces into the city’s decisive points, as were conducted by the armored columns of the US Army’s 3d Infantry Division on 5 and 7 April 2003, during Operation IRAQI FREEDOM.<sup>11</sup> The avenues used to capture Baghdad were the result of Saddam Hussein’s extensive infrastructure modernization program discussed at the beginning of this chapter.

Government-authorized construction of massive lower-class urban housing throughout the Middle East further illustrates the region’s rapid, urban population growth. In the interest of low cost and efficiency, this housing primarily consists of Western-style concrete block apartments that house the most people at the least cost and on the least land. Many of these modern housing developments have updated features but retain some of the characteristics of the traditional quarter. Residents in low-cost housing (buildings and blocks) may be formally or informally organized along recognizable tribal, religious, family, or occupational divisions. Examples of this include refugee camps and housing for foreign guest workers. These sanctioned and organized neighborhoods, over time, become modern ethnic quarters that still keep many traditional characteristics.<sup>12</sup>

Because of accessibility and familiarity with the design, segregation in the modern development will likely be discerned by Western military intelligence operations. Military force can be brought to bear in this new, modern neighborhood more quickly, with greater discrimination, and with more accurate effects. Thus, concentrating the population in modern housing complexes simplifies many of the tactical obstacles created by the maze of streets and residences in the traditional city.

Despite massive building projects in many cities, regional government efforts have not kept pace with urban population growth. As a result, in addition to authorized low-cost housing construction, unauthorized housing construction in the form of squatter developments and shantytowns is

afflicting all the region's major urban areas. Unauthorized housing systematically attempts to occupy any underused urban space, one of the many challenges to urban development that, with others, will be discussed in the next chapter.

One aspect of the urban landscape receiving much attention from the governments of the region is transportation. Most Middle Eastern countries have invested heavily in airports and seaports. Airports are particularly important since great distances, poor road networks, and formidable terrain separate most of the region's urban centers. Air terminals serving the region's capital cities are modern and have substantial capacity and are typically located outside the city centers; for example: Damascus' airport is 35 kilometers from downtown, Kuwait City's is 16 kilometers, and Baghdad's is 50 kilometers from the city center.<sup>13</sup> In addition, minor contemporary airports service many smaller cities such as Alexandria, Egypt, and Aleppo, Syria. Iraq has an estimated 100 paved and unpaved airfields.<sup>14</sup> Other estimates show that Saudi Arabia had almost 70 paved runway airfields by 1991.<sup>15</sup> In most cities, the road system has been updated to permit rapid movement from the airport to the city center. Control of these air facilities enables the conduct of military operations, and their peripheral locations make them relatively easy to secure before conducting operations deep in the city center. Their fringe location also permits them to be more easily defended from external threats.

Middle Eastern seaports are another critical element of cities. They simultaneously import most of the urban area's food requirements and are the terminal hubs for exporting the region's most valuable commodity—petroleum. Seaports also become the nexus of logistics operations for any military operation in the region. Virtually all the countries have relatively decent, if not outstanding, port capacity fronting the Mediterranean Sea, the Red Sea, or the Persian Gulf. Ensuring these transportation hubs function properly, since they are essential to the regional economy, is critical to the success of any military operation. Unlike the airports, port facilities are usually embedded deep in the urban core. Therefore, protecting and maintaining security at these sites can be a significant challenge in the face of unconventional or terrorist threats and may require considerable forces even if a conventional military threat is absent.

Modernization has extensively changed the size and the body of the Middle Eastern city. The old city center is now only a small part of cities and in some cases has been eliminated entirely. While aspects of the old city, like the city walls and baths, may still remain, they have lost their previous

functional importance. In their place is a modern, busy, business district surrounded by miles of residential areas often divided economically by class. Most of them are built in a simple, utilitarian, Western-architectural style, especially those intended for the lower class. Modern airports and seaports connect the Middle Eastern city to the region and the world. These transportation hubs are key to the economic well-being of many cities and critical to ensure the population's food supply. Changes in Middle Eastern cities have, for the most part, tended to make them more similar to Western cities. However, the changes have largely been physical and functional, whereas much of the political, religious, social, and cultural structure of the city has adapted to modernization without fundamental change.

## Notes

1. Helen Metz, ed., *Jordan, A Country Study*, 4th ed. (Washington DC: US Government Printing Office, 1991), 92.
2. Michael Bonine, ed., *Population, Poverty, and Politics in Middle Eastern Cities*, "Ruptures in the Evolution of the Middle Eastern City" by Mohammad Al-Asad, (Gainesville, FL: University of Florida Press, 1997), 47-48.
3. Gordon Robinson and Paul Greenway, *Bahrain, Kuwait and Qatar Demystifying the Desert* (London: Lonely Planet Publications, 2002), 116.
4. George Shiber quoted by B.D. Clark, "Urban Planning: Perspectives and Problems," in G.H. Blake, 170.
5. Bianca, 249-256.
6. Justin Thompson, "Saddam's Palaces," *CBC News Online*, April 7, 2003. [http://www.cbc.ca/news/iraq/issues\\_analysis/saddam\\_palaces.html](http://www.cbc.ca/news/iraq/issues_analysis/saddam_palaces.html).
7. Louis A. DiMarco, "Urban Operations Through the Ages," in *Block by Block: The Challenges of Urban Operations*, Glenn Robertson, ed. (Fort Leavenworth, Kansas: US Army Command and General Staff College Press, 2003), 20.
8. Michael Oren, *Six Days of War: June 1967 and the Making of the Modern Middle East* (New York: Random House, 2002), 244-245.
9. Beattie, 88.
10. Dan Richardson, *A Rough Guide to Egypt* (London: Penguin Books Ltd., 2003), 108.
11. Williamson Murray and Robert H. Scales, *The Iraq War, A Military History* (New York: Belknap Press, 2003), 209-218.
12. Greenshields, 133.
13. Distances compiled from three sources: Damascus—Beattie, 67; Kuwait City—Robison, 135; Baghdad—Dabrowska. 94.
14. Dabrowska, 94.
15. Metz, Saudi Arabia, 168.

## Chapter 5

### Challenges: The Negative Impact of Modernity

The traditional Middle Eastern city centered around the mosque, the marketplace, and the family courtyard home and organized into homogeneous quarters still exists in many urban areas, particularly in smaller cities. However, the challenges modernization has created in the 20th and 21st centuries have made it either undesirable or difficult to maintain tradition in the face of progress. The typical Middle Eastern city faces many challenges similar to those faced throughout the developing world: housing shortages, inadequate services, underemployment, pollution, and war. Middle Eastern cities are also in the midst of another crisis, a cultural one between modernization and traditionalism. In its most benign form, this crisis manifests itself in arguments over city renewal, zoning, and architectural designs. At its worst, it takes the form of radical Islamic terrorism. All these challenges can affect military operations in the region, especially during the transition phase—after the conclusion of combat operations but before civil authority is reestablished.

The dramatic explosion of the region's urban population has produced a chronic housing shortage that has significantly changed Middle Eastern city residential areas, moving them away from the traditional residential quarter previously described. Although the urban housing shortage is partially a result of rural-to-urban migration, its primary cause is the phenomenal birth rate occurring across the Middle East. In Egypt, the population was 35 million in 1971, 57 million in 1993, and projections indicate will be 100 million by 2025. This massive population growth is mostly concentrated in the cities. Egypt's urban population grew 3.3 percent annually in the early 1990s, twice the rural population growth, with 46 percent of Egyptians living in cities.<sup>1</sup> Many Middle Eastern cities have not been able to meet the needs of their citizens. Governments have tried to solve the housing shortage by building nondescript and relatively inexpensive Western-style apartment complexes. Central planning, cost limitations, and speed of construction have resulted in formulaic, drab, crowded, modern neighborhoods. Journalist Judith Miller describes a Cairo neighborhood:

The Farouqs lived in Bulak al-Dakrur, where some fifty thousand Egyptians were crammed into an area no bigger than three football fields. Bulak's unpaved, garbage-strewn streets were so narrow and the buildings so close together

that the sun was barely visible at noon.<sup>2</sup>

Bulak al-Dakrur is typical of the raw, hastily constructed tenements that many Middle Eastern governments have built in response to their urban housing needs. The strain of rapid expansion has severely tested and overburdened the urban infrastructure in many cities. Support systems cannot expand as fast as the residential sectors. Services such as phone systems, public transportation, medical care, and electrical service cannot keep up with demand. In many cities, neighborhoods go without electricity on a regular basis.<sup>3</sup>

Quality of life has significantly declined for the average person, another consequence of the region's population increase. Since most people must live outside of the old city, the moral and ethical constraints a tight-knit traditional community provides are often lost in the large, sprawling housing developments. Government bureaucracies that enforce secular law, economic controls, and social services have not been as effective as the informal local systems left behind in the old city. Corruption is much more prevalent in the modern Middle Eastern city districts than in the traditional. Movement of the population has also resulted in a social stratification along class lines. In the old city the population was segregated in many ways, but not by wealth. As the population increased, those that could afford it moved to the middle- and upper-class modern districts with the best amenities. The poor remained in the old city or congregated in the lower-class housing areas and squatter villages. Class segregation is a relatively new phenomenon in the Middle East, one that tends to break down traditional political loyalties. Thus, the fact that many Middle Eastern governments have modernized without considering tradition has undermined normal secular-religious alliances and has, in turn, brought the legitimacy of the government into question.

The petroleum industry, whose profits are both a benefit and a curse, exacerbates many of these problems. Another worrisome trend in the Middle East is the influx of foreign guest workers, a by-product of the oil industry. These workers congregate in their own ethnically distinct quarters in the region's larger cities. Their numbers are sometimes huge compared to the native population. All countries in the region treat guest workers as second-class citizens and many state services are not available to them. Though they are denied citizenship and permanent residency, many remain in a perpetual unofficial status. Guest workers provide the bulk of the labor force in most of the oil-rich Arab Persian Gulf countries. Many foreign workers are not Islamic and therefore miss out on the moral guidance and

sense of community that is integral to the mosque-based urban population. Outside of Islam's controlling structure these populations are often viewed with disdain and as a threat by the traditional native community. This injects additional stress into the already taxed social structure of the city. Ultimately, guest workers are a potentially destabilizing political force within the Middle Eastern city.<sup>4</sup>

In the non-oil states, rural migrants face many problems and conditions similar to those international guest workers face. They are generally illiterate and are only assimilated slowly.<sup>5</sup> Rural to urban migrants are not easily controlled by the government and often congregate in shantytowns (*sarifahs*) that are crudely constructed on the outskirts of cities. Homes in these areas are made from cast-off materials and vary greatly in composition. Generally, they do not have running water or electricity.

Shantytowns are indicative of economic depression and can discourage future investment in city development. For these reasons, most Middle Eastern cities have policies to eradicate shantytowns or assimilate them into the city plan. An example of assimilation is an innovative approach to squatters attempted in Amman, Jordan. There, the government instituted a project to improve the squatter building neighborhoods. The government built an infrastructure of roads and sewage systems and sold the squatters the land where they were located through provision of government loans. The government also provided the neighborhoods with minimal services. This project achieved some success, but is most important because it depicts government awareness of the problem and innovation in the search for solutions. Shantytowns provide a bridge for rural migrants to the city, though they do remain a source of health and sanitation problems and destroy both the old city and the aesthetically pleasing urban environment modern planners seek in the large cities.<sup>6</sup>

Shantytowns can also be the breeding ground for those dissatisfied with the city's leadership. In cities where the old traditional core has been destroyed or never existed, the center of religious activity now is in the midst of the urban poor. Thus, the shantytowns, as well as the lower-class government housing projects, have become the center of religious and political radical thought. Poverty and political and religious radicalism abound in these neighborhoods, making them havens for terrorists and urban insurgents. Insurgents use the grievances of the urban poor to garner recruits, support, and sanctuary. A key to countering terrorists and insurgents based among the urban poor is removing their grievances. Revitalizing the poor neighborhoods may be a critical military task in an effective urban

counterinsurgency.

Poor government regulation, high traffic volume, and overtaxed sewage systems have created huge pollution problems in Middle Eastern cities. In Kuwait City, average visibility in the early 1960s was six to nine miles. In the 1990s, visibility was often less than a mile due to pollution. Cairo is considered one of the most polluted cities in the world, though it has made recent improvements.<sup>7</sup> Frequently, high pollution result from the importation of European technology designed to function in a temperate European climate. This technology is not optimized in the often stagnant heat of the Middle East; hence, pollution caused by other energy-intensive systems is much more pronounced than the same number and type of systems would cause in Europe.

War is another obvious destabilizing problem plaguing many Middle Eastern cities. The continuous Arab-Israeli wars are only the most well known of its recent violent history, which also includes the Yemen Civil War, the Iran-Iraq War, the two Persian Gulf wars, and the Lebanese Civil War. These wars caused significant physical damage to many of the region's cities, some that can never be repaired, and unpredictable and adverse population fluctuations; they also continue to discourage investment in improvements and development.

The final and possibly most significant problem facing the Middle Eastern city is a cultural battle over the future of city design. This battle is between modernists, who see the progress of Middle Eastern cities reflected in a continued incorporation of western European design concepts and traditionalists, who insist the continued urban emphasis should be on the mosque, marketplace, and courtyard home. Traditionalists view the old city and its architecture as a critical expression of Islamic culture. As cities modernize in the Middle East they destroy their own culture: "Although the traditional house had its drawbacks, lacking sanitary facilities and total protection against dust-storms, it fulfilled a fundamental need in meeting religious and social criteria."<sup>8</sup> To many in the Middle East, the modern city does not meet cultural expectations.

This battle over city design reflects a larger issue polarizing the Middle East: a cultural and political battle between Western-oriented secular progressives and Islamic traditionalists. A contributor to the journal *Architectural Review* expressed the progressives' view of this struggle as "the dichotomization of cultural perception, where the historic heritage—cultural, religious, spiritual—is identified with the past, backwardness and poverty,

while the image of ‘progress’ is borrowed from elsewhere, namely the West.”<sup>9</sup> On the other hand, the traditionalists see the progressive point of view as the root of all or many of the region’s problems. They see tradition and, in particular, religious tradition as the solution. Traditionalists see “alienation from Islamic principles [as] the cause of Muslim decline. . . . The remedy. . . [is] more strict application of Islamic rules and principles.”<sup>10</sup> To traditionalists, the destruction of the old city core and the values it represents is a direct attack on Islamic culture in general. Replacement of the core with poverty-ridden, Western-style housing projects represents the corrupting influence of the West and modernization.

These conditions play a huge role in the rising radicalism throughout the region. For commanders, successfully managing the Middle Eastern city and negating radical action requires forging a compromise between the two points of view. Such a compromise helps cities meet the housing and infrastructure demands of an ever-expanding urban population while simultaneously retaining the traditions, cohesion, and stability of the traditional Muslim residence.

Military commanders operating in the region, particularly as they engage in stability and support operations, must understand that morally, and in some cases legally, military control over an urban area comes with the duty to respond to the problems inherent there. As indicated before these problems are weighty. In some cases they have frustrated the local authorities’ ability to solve them for years. Nonetheless, commanders will have to face these problems directly, and they will require expertise and capabilities not normally found in standard combat formations. Tackling these issues must begin early in the planning process so that the proper capabilities are there in the theater when needed. Any success military authorities have in reducing the problems of the modern city will not only improve the urban population’s quality of life, it will also help legitimize military authority during stability and support operations.

As Middle Eastern cities modernize they will continue to face a plethora of developmental problems: overcrowding, the breakdown of social relationships, challenges from minority groups, pollution, and poverty. These problems can cause great suffering among the people and ultimately lead to their political dissatisfaction. This unrest provides the base upon which radical religious terrorism can build. Military commanders cannot ignore the causes of political unrest when conducting urban operations. Successfully eliminating or mitigating the effects of growing radicalism must involve strategies to improve urban living conditions, poverty, pollution, and

the cultural dislocation modernization causes. This requires creative planning, a clear vision of the full spectrum of urban operations, integration of the capabilities of other agencies and non-governmental organizations, and expert execution. Properly executed, modern tactics that improve the people's standard of living can greatly help legitimize military forces during urban operations. However, modernization must be accomplished in a way that demonstrates its compatibility with the culture of the Middle Eastern city as represented by the values and characteristics associated with the traditional city core.

## Notes

1. Miller, 55.
2. Ibid., 35.
3. Brunn, 1997, 343.
4. Ibid., 1997, 343.
5. Ibid., 1997, 344.
6. Ibid., 1997, 344.
7. Ibid., 1997, 345.
8. Al-Nafea', 335.
9. Unknown Author, "A Living Culture (Middle Eastern Modern Architecture), *Architectural Review* (March 1998).
10. Shireen T. Hunter, *The Future of Islam and the West: Clash of Civilizations or Peaceful Coexistence?* (Westport, CT: Praeger, 1998), 77.



## Chapter 6

### Conclusions

The Middle East is one of the most urbanized regions of the world; urbanization continues there at an unprecedented rate. Cities have been the focus of society in the region for millennia and will continue to be the centers of religion, culture, economics, and politics. It is impossible to conduct significant military operations in the region without being decisively engaged within its cities.

Every Middle Eastern city can be described in terms of several cities overlain on one another: there is the traditional city under the sway of strong Islamic influence and centuries of customs and traditions, the third-world city that represents all the developing world problems and challenges, and the modern city that city planners and developers are striving to build. Various urban models describe the patterns formed by these diverse, urban influences. The Islamic City Model exhibits the strong impact of religion on urban life. The Zeigler Model shows how the city has grown and changed over time. The Multi-nuclei Model exhibits how city land use is related spatially and divided functionally and among social and economic groups; it also illustrates how the city's disparate sectors are tied together through the network of mosques and Islam. Though each of the models contributes to understanding the city, none capture all its important influences. Some key factors such as geography, colonialism, and the petroleum industry do not lend themselves to modeling. Successful military operations in the region require, as a starting point, an understanding of all these models, all other factors, and how they combine to define the general nature of Middle Eastern cities. This should inform the military commander's vision for the successful conduct of Middle Eastern urban operations.

Of the various components of the Middle Eastern city models, the old city core is the most different from cities in other world regions. It is also this part of the city that currently has the most popular cultural and political influence in many urban centers.

FM 3-06, *Urban Operations* outlines the urban triad by explaining the three basic analytical components of the city: the physical component, the urban infrastructure of support systems, and the urban population with its associated social and cultural characteristics.<sup>1</sup> These three components are more closely interrelated in the traditional Middle Eastern city than perhaps any other city sector in the world. This is a result of the influence

of religion on society. Islam, and its associated laws, customs, internal divisions, and characteristics, pervades urban life in the old city. Religion informs the city's architecture and how the sector is physically organized. Its infrastructure, including medical, legal, economic, and a myriad of other systems, are all influenced if not directly controlled by religion. Finally, how the population of the old city lives and relates to each other, their leaders, their politics, and their worldview are all directed by Islam and the *ulema*'s guidance, which makes the old city a likely decisive point in urban operations. Thus, commanders wanting to ensure their forces are engaged at the decisive points must understand the old city and will likely have to commit forces there. They will also likely have to engage with the *ulema* leaders based there.

As well as being a religiously and politically decisive area, the old city is also physically challenging to military forces. The community is close-knit, making HUMINT intelligence activity more difficult. Its street construction and patterns make many parts impenetrable to vehicles. House styles (like the courtyard home) are more secure from rapid seizure or search, and the winding streets and alleys without patterns make navigation tasks difficult. Tactical operations in the area, therefore, require specific TTP, additional planning, and careful execution.

Though commanders must have a keen understanding and be decisively engaged in the traditional Islamic city structure, they must also understand how the modern Middle Eastern city has evolved from its medieval center. Most of the secular government and business interests, along with the population, have migrated to the colonial sector, the CBD, and outlying residential areas (see Figure 3). The colonial sector and CBD are critical because the secular bureaucracies operating the city will be located here, and the CBD, in particular, is vital to the city's economic prosperity. In cases where the old city does not exist, the center of religious activity has moved to the residential areas. In such circumstances, the important mosques, the key *ulema*, and the *madrassa* may be found among the poorest areas. Military commanders must identify those neighborhoods in the modern city that are the focus of Islamic influence. Commanders must then become engaged in these neighborhoods because it is here that discontent turns into radical action. Poor neighborhoods become the breeding ground for terrorists and insurgents.

Many modern Middle Eastern cities are part of the developing world; hence, they face a host of problems associated with excessively rapid urban expansion, overpopulation, and inefficient services. Many societal problems

develop from these circumstances. Commanders must enter into Middle Eastern urban operations cognizant of these problems, with a plan to address them, even as combat operations may be ongoing. How well military forces deal with these problems plaguing the urban population may be more essential to overall mission success than their unit's ability to conduct urban combat operations.

Successful military operations in the Middle Eastern city require an assessment structure that begins with a basic understanding of the city as outlined in this study. From that point, the assessment can develop in an infinite number of ways depending on the factors of the mission, the local conditions, and the unique geopolitical circumstances setting the context of the operation. It will require the leveraging of a wide variety of military, academic, civil business, and local information sources. Although they share many regional characteristics, all cities are unique and each must be assessed individually. Shaping and decisive operations can only be effective in this complex environment if the commander's vision includes the impact the Middle Eastern city's multi-dimensional structure has on military capabilities. His vision also must include the effects military capabilities have on the city. Finally, transitioning the military mission to a stable state after mission accomplishment requires that the commander and the military capabilities he controls continue to engage in the fabric of the old city after decisive combat operations are complete. Stability and support operations are likely to be more critical to overall mission success than pure combat operations.



Figure 18. The Al Azhar Mosque in downtown Cairo, built in 969 A.D., illustrates the dramatic contrast and often conflict between the modern and traditional city (Department of Defense Photo).

The Middle East is and will continue to be a vital area to American national security interests. Effectively employing the military instrument of national power is a major component of successful US regional policy. It is impossible for military forces to operate within the region without becoming decisively involved in the region's cities. This requires engagement, both physically and intellectually, in the tangle of alleyways, quarters, courtyard homes, religious practices, and customs of the traditional Middle Eastern city. It requires applying military capability to mitigating or solving many of the urban problems affecting the people living there. Commanders who enter this labyrinth of religion, culture, politics, and tradition armed with knowledge of the environment are much more capable of achieving decisive effect in the Middle Eastern city, and in the entire region.

## Notes

1. FM 3-06, 2-2.



## Bibliography

- Ajami, Fouad. *The Dream Palace of the Arabs: A Generation's Odyssey*. New York: Vintage Books, 1999.
- Al Sayyad, Nezar. *Cities and Caliphs: On the Genesis of Arab Muslim Urbanism*. New York: Greenwood Press, 1991.
- Al-Nafea', Nada, and Rosie Llewellyn-Jones. "Riyadh's Vanishing Courtyard Houses." *Asian Affairs*. 28, no. 3 (October 1997): 335.
- Antoniou, Jim. *Historic Cairo—A Walk Through the Islamic City*. Cairo, Egypt: American University in Cairo Press, 1999.
- \_\_\_\_\_. "The Architectural Review in the Gulf." *The Architectural Reivew*. 203, no. 1215 (May 1998): 17.
- Armstrong, Karen. *Jerusalem: One City, Three Faiths*. New York: Ballantine Books, 1996.
- Asfour, Khaled. "Cultural Crisis." *The Architectural Review*. 203, no. 1213 (March 1998): 52.
- Ashworth, G.J. *War & the City*. London: Routledge, 1991.
- Aussaresses, Paul. *The Battle of the Casbah: Terrorism and Counter-terrorism in Algeria, 1955-1957*. New York: Enigma Books, 2002.
- Beattie, Andrew and Timothy Pepper. *A Rough Guide to Syria*. London: Penguin Books Ltd., 2001.
- Becker, Chrisanne. *100 Great Cities of World History*. San Francisco, CA: A Bluewood Book, 1995.
- Bianca, Stefano. *Urban Form in the Arab World: Past and Present*. New York: Thames and Hudson, 2000.
- Bianucci, Rita, Giovanna Magi, and Giulian Valdes. *Art and History of Jerusalem*. Florence, Italy: Casa Editrice Bonechi, 2002.
- Blake, G.H., and R.I. Lawless, eds. *The Changing Middle Eastern City*. London: Croom Helm, 1980.
- Bonine, Micheal E., ed. *Population, Poverty, and Politics in Middle Eastern Cities*. Gainesville, FL: University Press of Florida, 1997.
- Brown, Carl L., ed. *From Medina to Metropolis: Heritage and Change in the Near Eastern City*. Princeton, NJ: The Darwin Press, 1973.
- Brunn, Stanley D., Jack Francis Williams, and Michael E. Bonine. *Cities of the World: World Regional Urban Development*, 2d ed. New York: Harper & Row, 1997.

- Brunn, Stanley D., Jack Francis Williams, and Michael E. Bonine. *Cities of the World: World Regional Urban Development*, 3d ed. New York: Harper & Row, 2003.
- Çelik, Zeynep. "New Approaches to the 'Non-Western' City." *Journal of the Society of Architectural Historians*. 58, no. 3 (September 1999): 374-81.
- Collelo, Thomas, ed. *Syria: A Country Study*, 3d ed. Washington DC: US Government Printing Office, 1988.
- Costello, V.F. *Urbanization in the Middle East*. New York: Cambridge University Press, 1977.
- Dabrowska, Karen. *Iraq: The Bradt Travel Guide*. Bucks, UK: Bradt Travel Guides Ltd., 2002.
- Degen, E.J., Gregory Fontenot, and David Tohn. *On Point: The United States Army in Operation Iraqi Freedom*. Fort Leavenworth, KS: Combat Studies Institute Press, 2004.
- Dewar, Michael. *War in the Streets: The Story of Urban Combat from Calais to Khafji*. London, UK: BCA, 1992.
- Drakakis-Smith, David. *Third World Cities*, 2d ed. New York: Routledge, 2000.
- Farah, Caesar E. *Islam*, 7th ed. New York: Barrons, 2003.
- Frishman, Martin and Hasan-Uddin Khan, eds. *The Mosque: History, Architectural Development and Regional Diversity*. New York: Thames and Hudson, 1994.
- Fromkin, David. *A Peace to End All Peace: Creating the Modern Middle East, 1914-1922*. New York: Owl Books, 2001.
- Gilbert, Martin. *Jerusalem: Rebirth of a City*. New York: Elisabeth Sifton Books/Viking, 1985.
- Girouard, Mark. *Cities and People: A Social and Architectural History*. New Haven, CT: Yale University Press, 1985.
- Glenn, Russell W. and Jamison Jo Medby. *Street Smart: Intelligence Preparation of the Battlefield for Urban Operations*. Santa Monica, CA: Rand Corporation, 2002.
- Held, Colbert. *Middle East Patterns: Places, People and Politics*. Boulder, CO: Westview Press, 1989.
- Herbert, Richard, ed. *Symposium on the Arab City: Its Character and Islamic Cultural Heritage (Paper Abstracts)*. Medina, Saudi Arabia: Arab Urban Development Institute, 1981.

- Hitti, Philip K. *Capital Cities of Arab Islam*. Minneapolis, MN: University of Minnesota Press, 1973.
- Horne, Alistair. *A Savage War of Peace: Algeria 1954-1962*. New York: Penguin Books, 1985.
- Hunter, Shireen T. *The Future of Islam and the West: Clash of Civilizations or Peaceful Coexistence?* Westport, CT: Praeger, 1998.
- Inman, Nick. *Eyewitness Travel Guides: Istanbul*. New York: Dorling Kindersley Publishing, Inc., 1998.
- Joint Staff. Joint Publication 3-06, *Doctrine for Joint Urban Operations*. Washington, DC: National Defense University Press, 2002.
- Karsh, Efraim and Inari Karsh. *Empires of the Sand: The Struggle for Mastery in the Middle East, 1789-1923*. Cambridge, MA: Harvard University Press, 2001.
- Keay, John. *Sowing the Wind: The Seeds of Conflict in the Middle East*. New York: W.W. Norton & Company, 2003.
- Kepel, Gilles. *Jihad: The Trail of Political Islam*. Translated by Anthony F. Roberts. Cambridge, MA: Harvard University Press, 2002.
- Kheirabadi, Masoud. *Iranian Cities: Form and Development*. Austin, TX: University of Texas Press, 1991.
- Kostof, Spiro. *The City Shaped: Urban Patterns and Meanings Through History*. New York: Bulfinch Press, 1991.
- Lapidus, Ira M. *Middle Eastern Cities*. Berkeley, CA: University of California Press, 1969.
- Lewis, Bernard. *The Middle East: A Brief History of the Last 2000 Years*. New York: Simon and Schuster, 1995.
- \_\_\_\_\_. *What Went Wrong?* New York: Oxford University Press, 2002.
- Martin, Vanessa. "Illusions of the City." *Journal of Urban History*. 2, no.6 (September 1997): 760-770.
- Metz, Helen, ed. *Jordan: A Country Study*, 4th ed. Washington DC: US Government Printing Office, 1991.
- \_\_\_\_\_, ed. *Saudi Arabia: A Country Study*, 5th ed. Washington DC: US Government Printing Office, 1993.
- Michell, George, Ernst J. Grube, James Dickie, Oleg Grabar, Eleanor Sims, Ronald Lewcock, Dalu Jones, and Gut T. Petherbridge. *Architecture of the Islamic World: Its History and Social Meaning*. London: Thames and Hudson, 1995.

- Miller, Judith. *God Has Ninety-Nine Names*. New York: Simon and Schuster, 1996.
- Mumford, Lewis. *The City in History: Its Origins, Its Transformations, and Its Prospects*. New York: Harcourt Brace Jovanovich Publishers, 1961.
- Murray, Williamson and Robert H. Scales. *The Iraq War: A Military History*. New York: Belknap Press, 2003.
- Oren, Michael B. *Six Days of War: June 1967 and the Making of the Modern Middle East*. New York: Random House, 2002.
- O'Sullivan, Edmund and Vahe Petrossian. "Can Urbanization Be Contained?" *MEED, Middle East Economic Digest*. 36, no. 28 (July 1992): 1-2.
- Pacione, Michael. *Urban Geography: A Global Perspective*. London: Routledge, 2001.
- Patai, Raphael. *The Arab Mind*. New York: Hatherleigh Press, 2002.
- Pollack, Kenneth M. *Arabs at War: Military Effectiveness, 1948-1991*. Lincoln, NE: University of Nebraska Press, 2002.
- Rasul, Zubaida. "Heaven Lies Beneath My Mother's Feet." *UN Chronicle*. 88, no. 1 (March-May 2001): 67.
- Richardson, Dan. *A Rough Guide to Egypt*. London: Penguin Books Ltd., 2003.
- Robertson, Glenn, ed. *Block by Block: The Challenges of Urban Operations*. Fort Leavenworth, Kansas: US Army Command and General Staff College Press, 2003.
- Robinson, Gordon and Paul Greenway. *Bahrain, Kuwait and Qatar: Demystifying the Desert*. London: Lonely Planet Publications, 2002.
- Saffold, Timothy L. "The Role of Airpower in Urban Warfare, An Airman's Perspective." *Air Command and Staff College Wright Flyer Paper No. 6*. Maxwell AFB, AL: Air University Press, 1998.
- Sciolino, Elaine. *Persian Mirrors: The Elusive Face of Iran*. New York: Touchstone Book, 2000.
- Serageldin, Ismail and Samir El-Sadek, eds. *The Arab City: Its Character and Islamic Cultural Heritage*. Riyadh, Saudi Arabia: Arab Urban Development Institute, 1982.
- Shabot, Joey, Ed. *Let's Go Travel Guide: Egypt*. New York: Saint Martin's Press, 2003.
- Spiller, Roger J. *Sharp Corners: Urban Operations at Century's End*. Fort Leavenworth, KS: US Army Command and Staff College Press,

2001.

Stewart, Dana J. "Middle East Urban Studies: Identity and Meaning." *Urban Geography*. 22 (2001): 175-181.

\_\_\_\_\_. "Middle East Urban Studies II: Growth, Environment and Economic Development." *Urban Geography*. 23 (2002): 388-394.

Sweet, Louise E. ed. *Peoples and Cultures of the Middle East. Volume 2: Life in the Cities, Towns, and Countryside*. New York: The Natural History Press, 1970.

Teller, Mathew. *A Rough Guide to Jordan*. London: Penguin Books Ltd., 2002.

Trinquier, Roger. *Modern Warfare: A French View of Counterinsurgency*. Translated by Daniel Lee. London: Pall Mall Press, 1964.

Unknown. "A Living Culture, (Middle Eastern Modern Architecture)." *Architectural Review*. March 1998.

US Department of the Army. Field Manual (FM) 3-06, *Urban Operations*. Washington, DC: Government Printing Office, 2003.

US Department of the Army. FM 3-06.11, *Combined Arms Operations in Urban Terrain*. Washington, DC: Government Printing Office, 2002.

US Department of the Marine Corps. Marine Corps Intelligence Association (MCIA)-2700-002-03, *Urban Generic Intelligence Requirements Handbook (UGIRH)*. Quantico, VA: Marine Corps Intelligence Activity, 2003.

Utvik, Bjørn Olav and Knut S. Vikør, eds. *The Middle East in a Globalized World: Papers from the Fourth Nordic Conference on Middle Eastern Studies, Oslo 1998*. "The Shari'a and the Nation State: Who can Codify the Divine Law?" by Knut S. Vikør. London: C. Hurst & Co Ltd., 1998.

Wedeman, Ben. "The Genuine Article." *The Middle East*. 232 (March 1994): 41-42.



## About the Author

Lieutenant Colonel Louis DiMarco was commissioned as a US Army Armor officer in 1981. His military assignments have included command and staff positions in armored cavalry squadrons and division, corps, and joint forces headquarters. His education includes a Bachelor of Science degree from the United States Military Academy, West Point, a Master of Military Art and Science degree from the US Army Command and Staff College, Fort Leavenworth, Kansas, and a Master of Arts degree in International Relations from Salve Regina University, Rhode Island.

He is working on his dissertation that focuses on US Army occupation and administration of German cities after World War II for his doctorate from Kansas State University. Currently, DiMarco is a faculty member with the Army Command and Staff College. DiMarco authored several key Army doctrinal manuals, one of which is US Army Field Manual (FM) 3-06, *Urban Operations* (2002), and contributed to the 2003 Combat Studies Institute publication, *Block by Block: The Challenges of Urban Operations*.



**Global War on Terrorism  
Occasional Paper 1**



---

**CSI Press**

---