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Fortress America: the aesthetics of homeland security in the public realm

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THESIS

FORTRESS AMERICA: THE AESTHETICS OF HOMELAND SECURITY IN THE PUBLIC REALM

by

Patti Quirk

September 2017

| Thesis Co-Advisors: | Carolyn Halladay |
| | Lauren Wollman |

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Architecture communicates a message about the purpose of a space, the prestige of those who use or own the space, and the values associated with both users and owners. The aesthetics of this architecture elicit specific emotions, communicate histories, and inform worldviews. In the United States, homeland security architecture is largely a physical representation of a perceived threat of a terrorist attack in public spaces. Architecture has sociological, psychological, and cultural effects, as well as security impacts, but there is little research or discourse on the physical manifestation of homeland security in the United States. What are the consequences—intended and unintended—of homeland security architecture? How does a democratic government protect itself and design buildings and public spaces that are open, attractive, and promote both physical and psychological security? This thesis is a starting point for broader awareness and discussion within the emerging discipline of security design about the importance of aesthetics in homeland security.

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FORTRESS AMERICA: THE AESTHETICS OF HOMELAND SECURITY IN THE PUBLIC REALM

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Submitted in partial fulfillment of the
requirements for the degree of

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ABSTRACT

Architecture communicates a message about the purpose of a space, the prestige of those who use or own the space, and the values associated with both users and owners. The aesthetics of this architecture elicit specific emotions, communicate histories, and inform worldviews. In the United States, homeland security architecture is largely a physical representation of a perceived threat of a terrorist attack in public spaces. Architecture has sociological, psychological, and cultural effects, as well as security impacts, but there is little research or discourse on the physical manifestation of homeland security in the United States. What are the consequences—intended and unintended—of homeland security architecture? How does a democratic government protect itself and design buildings and public spaces that are open, attractive, and promote both physical and psychological security? This thesis is a starting point for broader awareness and discussion within the emerging discipline of security design about the importance of aesthetics in homeland security.

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TABLE OF CONTENTS

LIST OF FIGURES

LIST OF ACRONYMS AND ABBREVIATIONS

AIA	American Institute of Architecture
ALO	architectural liaison officer
APA	American Planning Association
ASLA	American Society of Landscape Architects
CPNI	Centre for the Protection of National Infrastructure
CTSA	counter-terrorism security advisor
DHS	Department of Homeland Security
FEMA	Federal Emergency Management Agency
GSA	General Services Administration
ICE	Institute of Civil Engineers
IRA	Provisional Irish Republican Army
ISC	Interagency Security Committee
NaCTSO	National Counter Terrorism Security Office
NCPC	National Capital Planning Commission
RIBA	Royal Institute of British Architects
RSES	Register of Security Engineers and Specialists

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EXECUTIVE SUMMARY

In response to the terrorist attacks of 9/11, public spaces in the United States were quickly fortified with concrete barriers and metal fencing. This need for homeland security architecture is still a relatively new phenomenon in the United States. Architecture itself communicates a message about the purpose of a space, the prestige of those who use or own the space, and the values associated with both users and owners. The aesthetics of this architecture solicit specific emotions, communicate histories, and inform worldviews. In the United States, homeland security architecture today is largely a physical representation of a perceived threat of a terrorist attack in public spaces.

A cohesive approach to homeland security architecture in the United States has yet to form. This thesis is a starting point for a broader awareness and discussion within the emerging discipline of security design about the importance of aesthetics in homeland security. Architecture itself, and the corollary concept of aesthetics, has sociological, psychological, and cultural effects, as well as security impacts. Yet, today, there is still little related research or discourse in the United States.[1]

Calls for an empirical methodology for measuring the psychological impacts of public-realm architecture date back to late 2007, but a common research method has not been adopted.[2] Disciplines such as urban planning, urban geography, environmental psychology, architecture, history, and sociology can help create a framework through which to evaluate the lasting effects of homeland security architecture.[3]

U.S. public architecture has embodied the American values of civic participation and public open spaces from its very beginnings. The government has a responsibility not just to protect its citizens, but also to protect the country's values. In contrast to the

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[1] For the purposes of this thesis, architecture is defined as the art or practice of designing and constructing buildings or structures.

[2] Jeremy Nemeth and Stephan Schmidt, "Toward a Methodology for Measuring the Security of Publicly Accessible Spaces," *Journal of the American Planning Association* 73(2007): 283–297.

[3] "Urban geography is a branch of human geography concerned with various aspects of cities. An urban geographer's main role is to emphasize location and space, and study the spatial processes that create patterns observed in urban areas." Amanda Briney, "An Overview of Urban Geography," *ThoughtCo*, last revised February 28, 2017, https://www.thoughtco.com/overview-of-urban-geography-1435803.

public's guaranteed freedom to assemble, homeland security architecture itself tends to create physical barriers in cities between people on the outside and people on the inside—physical barriers between the public and open spaces where they might gather.

This thesis explores homeland security architecture's consequences on the American psyche. If architecture can communicate positive messages of aspiration and integrity, it can also communicate less positive messages, such as insecurity. Poorly designed homeland security architecture creates physical and psychological barriers that prevent the people's access to their government and public spaces. Blatant security measures in public spaces can evoke defensiveness, suspicion, paranoia, and insecurity.[4]

This thesis proposes that the lack of consideration for aesthetics in homeland security architecture is largely a consequence of its origins, and posits relevant considerations for addressing this issue. Security professionals charged with keeping the public safe in the immediate aftermath of 9/11 used tools already familiar to them (such as barricades). It is possible that, if design professionals had been tasked with solving the same security problem, very different tools would have been used—tools that considered aesthetics when solving a problem.

As such, the thesis examines the role of public spaces in democratic societies, the influence of economics and politics on homeland security architecture, and how the psychology of fear influences people's response to unpredictable threats. It also offers other topics of importance for consideration that either directly or indirectly contributes to the hypothesis. To do so, it addresses the history of the public forum, the importance of public space in the expression of our constitutional rights to assembly, and the psychological impacts of homeland security architecture. It then considers the economics and prestige driving homeland security design decisions. In later chapters, the thesis reviews design guides and policies created after 9/11 and the role of professional associates in shaping the aesthetics of homeland security architecture. Finally, the thesis presents the current state of homeland security architecture in the United States and offers recommendations for improving aesthetics in U.S. homeland security.

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[4] Jon Coaffee, Paul O'Hare, and Marian Hawkesworth, "The Visibility of (In)security: The Aesthetics of Planning Urban Defences against Terrorism," *Security Dialogue* 40 (2009): 489–511.

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I. INTRODUCTION

From the beginning of the miraculous experiment in democracy called America, public architecture has played a significant role in helping to define our beliefs as a new nation. Such public buildings in the United States as courthouses, town halls, and libraries have, through their design, expressed "to our fellow citizens the stability and endurance of their government, while representing the openness and transparency that is vital to our democracy."[1] Architecture communicates enduring political ideology and societal values. The surge in global terrorist attacks on civilian targets and the increase in domestic terrorist attacks have contributed to a diminished sense of security within U.S. borders. The political messages that public architecture communicates are as important now as at any other point in U.S. history, as Americans face a diminished sense of security with its borders.

Archtiecture can inspire creativity, elicit feelings of patriotism, and inspire civic engagement. Architects design public buildings, national monuments and public spaces for people to interact with their government, history, and each other. Visitors to public places—like Valley Forge, historic site of the American war for Independence, the Lincoln Memorial, a tribute to the president who shepherded the United States through its civil war, and Ellis Island, where many immigrants seeking freedom passed into the country—can experience the history of Amercian democracy. All things considered, the United States in the modern age was a relatively safe place to live. American wars were fought on foreign soils. Americans became accustomed to safety within their borders. Freedom of movement and access to public spaces, by and large, were not been restricted (with the tragic exception of interning Japanese Americans during World War II). Terrorist attacks happened overseas to those Amercians who ventured outside of the United States. That is until a fateful morning in 1995 when Timothy McVeigh and fellow conspiritors killled 168 people in a bombing attack on a federal building in Oklahoma City. Americans were stunned by this first modern domestic terrorist attack. The bombing

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[1] General Services Administration (GSA), *The Site Security Design Guide* (Washington, DC: GSA, 2007), 5.

targeted a federal office buidling, but the deaths of nineteen children in the building's daycare made the attack seem even more sinister. The era of open and accessible public spaces in the United States was coming to an end.

In the years following the attack on the Murrah Federal Building in Oklahoma, the federal government began a concerted effort to evaluate and improve the security of all government-owned facilities. Executive Order 12977, signed by President Clinton six months after the bombing, created the Interagency Security Committee (ISC) to address physical security at nonmilitary federal facilities. The ISC noted that previous "minimum physical security standards did not exist for nonmilitary owned or leased facilities."[2] For the first time in the United States, comprehensive physical security standards for federal employees located at nonmilitary installations would be established. The ISC's initial security assessments focused on evaluating and providing safety improvements at government-owned facilities, though half of the 1.2 million federal employees worked in leased spaces.[3]

Meanwhile, the terrorist attacks of 9/11 accelerated and expanded the ISC's site assessments and recommendations to include all federal workplaces. The ISC ultimately created a "lease security standards" document to "provide a consistent level of security to federal tenants in leased spaces," which was comparable to safety standards for federally owned facilities.[4] The terrorist attacks of 9/11 proved that all American workers, government employees or not, as well as the American public were vulnerable to terrorist attacks.

Before 9/11, terrorist attacks were focused on financial, government, and military targets. Attacking from the sky in commercial airlines, the 9/11 terrorists created an awareness and fear that an act of terrorism could happen anywhere, at any time. Crowded

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[2] "Interagency Security Committee Overview," Department of Homeland Security (DHS), last published June 28, 2017, https://www.dhs.gov/interagency-security-committee.

[3] "Leasing Overview," GSA, last reviewed May 24, 2017, http://www.gsa.gov/portal/content/104480.

[4] "Lease Security Standards: Instructions for Lease Acquisitions," GSA, accessed September 6, 2017, 1, https://www.gsa.gov/graphics/pbs/RSL_Security_Addendum_1_R20O3-e_0Z5RDZ-i34K-pR.pdf.

public spaces have since become primary targets for terrorists.[5] According to urban security expert Jon Coaffee, commercial buildings, national monuments, sports venues, and any place where the public assembles are potential targets that must be secured or fortified against terrorist attacks.[6] In the post-9/11 United States, there has been a significant change in how the public can move through and use public spaces. For the sake of homeland security, modifications restricting or preventing access to public spaces appeared on the urban landscape seemingly overnight. This new reality of increased public security has a distinct look and design: concrete and steel barriers, tall fences, and security screening areas that are a sharp contrast to the surrounding architecture.

Thus, homeland security architecture is a physical representation of a perceived threat of a terrorist attack in public spaces. For the purposes of this paper, homeland security architecture refers to any structure, enhancement, or design whose primary function is to prevent a terrorist attack, a vehicle-borne explosive device, or the use of a vehicle as a weapon of terror. It tends to be manifested as fencing, bollards, concrete blocks, and large planters used to create a security zone around a facility in what had previously been an open public space. Homeland security architecture has adapted design and infrastructure elements generally associated with prisons or military bases for use in public spaces.

As a result, the American public is now constantly reminded of its vulnerability to terrorist attacks as it navigates through increased security screening at airports, sporting events, concerts, and classrooms. Stephen Graham, author of the book *Cities under Siege*, has described the application of security measurers formerly reserved for military facilities to public spaces as "military urbanism."[7] Graham notes that "fundamental to the new military urbanism is the paradigmatic shift that renders' communal and private spaces, as well at their infrastructure—along with their civilian populations—a source of

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[5] Jon Coaffee, Paul O'Hare, and Marian Hawkesworth, "The Visibility of (In)security: The Aesthetics of Planning Urban Defences against Terrorism," *Security Dialogue* 40 (2009): 489–511.

[6] Ibid.

[7] Stephen Graham, *Cities under Siege: The New Military Urbanism* (New York: Verso, 2011), 11.

targets and threats."[8] Now that public spaces are primary targets, they are at risk to become victims of military urbanism.

It is here that the concept of aesthetics becomes relevant. Put simply, aesthetics designate "a kind of object, a kind of judgment, a kind of attitude, a kind of experience, and a kind of value."[9] Scientists who study aesthetics evaluate how design affects the brain and elicits emotional responses. The human response to design aesthetics is considered in everything from the design of correctional facilities to fast food chains. Aesthetics can influence mood, appetites, and energy levels. The sensitivity to the design of homeland security architecture can, in a public place, mean the difference between an inviting space and a desolate no-man's land. Retrofitting a space to include homeland security architecture rather than designing homeland security architecture into a new space might affect the aesthetics of a design.

Retrofitting spaces with homeland security architecture features will likely continue for years to come, potentially altering the aesthetics of carefully planned urban landscapes and degrading public spaces. Further, unless there is an establishment of design guides that consider the aesthetics of homeland security architecture, the potential for communicating negative messages to the public is worrisome. Architecture communicates a philosophy, purpose, or value. For example, according to renowned American architect Frank Lloyd Wright, "the circle [suggests] infinity; the triangle, structural unity, the spire, aspiration; the spiral, organic progress; and the square [or rectangle] integrity."[10] The values associated with shapes help explain churches topped with spires (aspiration) and courthouses with a rectangular shape (integrity).

It follows that if architecture can communicate positive messages of aspiration and integrity, it can also communicate less positive messages, such as insecurity. It may be argued that visible security measures act as a deterrent to would-be attackers and can

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[8] Graham, *Cities under Siege*, 11.

[9] James Shelley, "The Concept of the Aesthetic," *Stanford Encyclopedia of Philosophy*, last revised September 12, 2013, https://plato.stanford.edu/entries/aesthetic-concept/.

[10] "Geometric Shapes," Guggenheim, accessed September 6, 2017, https://www.guggenheim.org/arts-curriculum/topic/geometric-shapes.

make the public feel safe and protected. However, little consideration is given to the fact that these security measures might also make the public feel anxious and unwelcome in the public spaces. Fortified public spaces run the risk of being abandoned or avoided by the public—the group that the security modifications were intended to protect—and can communicate a message of fear as easily as a message of strength.

This thesis seeks to evaluate the consequences of homeland security architecture on the American psyche.[11] It considers the fortification of public spaces such as sidewalks and plazas through the lenses of architecture and urban design. To do so, it examines how the United Kingdom addresses similar concerns. Finally, this thesis reviews other factors, such as economics and the psychology of fear, that might influence homeland security architecture decisions.

A.   RESEARCH QUESTIONS

This thesis seeks to answer the following questions: What are the consequences—intended and unintended—of homeland security architecture? How does a democratic government protect itself and design buildings and public spaces that are open and attractive?

B.   PROBLEM STATEMENT

At the time of this writing, the most recent terrorist attacks—including Paris (November 2015), Belgium (March 2016), Orlando (June 2016), and Nice (July 2016)—are vivid reminders of the attraction and vulnerability of soft targets (a person or thing that is relatively unprotected and exposed to an attack) to terrorists.[12] Western governments must balance the need to protect the public with the need to create spaces that do not feel overtly militarized and allow for the exercise of protected rights, such as the right to assemble. The aesthetic choices made for homeland security architecture today will shape American society and communicate to the world the values of the

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[11] Graham, *Cities under Siege*.

[12] *English Oxford Living Dictionaries*, s.v. "Soft Target," accessed August 25, 2017, https://en.oxford dictionaries.com/definition/soft_target.

United States. The United States can either become a country paranoid by the constant fear of attack or a strong, resilient nation that endures despite the threat of attack.

For instance, many historic and cultural symbols of American freedom and democracy are now secured and protected for the public while simultaneously restricting public access. One such example was a National Park Service proposal to erect tall security fencing and checkpoints around Independence Hall in Philadelphia. The City of Philadelphia defeated the proposal, successfully arguing that the fencing design was more appropriate around a military facility than the birthplace of the nation.[13] It may be, in fact, that what might be called "homeland security architecture" communicates a message inconsistent with a democratic society. Americans value the right to pursue happiness and to live free from fear. Aesthetics can support these desires—or subvert them.

Beyond pure safety objectives, homeland security architecture may be influenced by economics and private security agendas rather than sound public need or policy.[14] Americans are, arguably, not measurably safer, nor are security installations always constructed in response to a specific threat assessment.[15] Rather, homeland security architecture seems to be designed for the worst-case scenario instead of the most likely scenario.

On the other hand, a more balanced approach to security can be found in the United Kingdom, where homeland security architecture not only preserves public spaces but also enhances them. The United Kingdom has experienced a steady stream of terrorist attacks by the Provisional Irish Republican Army (IRA) since the 1960s. Accordingly, Belfast served as a design laboratory "for radical experiments on fortress urbanism."[16] By 9/11, the British had spent forty years experimenting with and evaluating homeland

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[13] Ian Urbania, "City takes on the U.S. in the Battle of Independence Square," *New York Times*, August 9, 2006.

[14] Graham, *Cities under Siege*.

[15] Susan Silberberg, "Pretext Securitization of Boston's Public Realm after 9/11: Motives, Actors, and a Role for Planners," in *Policing Cities*, ed. Randy K. Lippert and Kevin Walby (Padstow, Cornwall: TJ International, 2013), 246.

[16] Jon Coaffee, "Rings of Steel, Rings of Concrete and Rings of Confidence: Designing out Terrorism in Central London Pre and Post-September 11th," *International Journal of Urban and Regional Research* 28, no. 1 (2004): 201.

security architecture design. The United Kingdom learned from experience in Belfast that building higher walls and taller security fences did not stop terrorist attacks, and that the approach actually demoralized the public, who had to live in a fortress surrounded by a ring of steel. Homeland security architecture in the United Kingdom has matured and evolved as a profession and is now an integral part of all urban design. UK citizens benefit from aesthetical public spaces where security objectives are met with tiered landscapes, water features, artwork, and attractive public seating, all carefully designed to diminish the effects of a terrorist attack.

Meanwhile, the United States is more than a decade past the terrorist attacks of 9/11. Americans have matured and sobered as a society, realizing terrorist attacks are the new reality. How America responds to this new reality is yet to be determined. To this end, however, this thesis begins with the proposition that homeland security architecture can be functional and attractive, as it is now in the United Kingdom. Americans should demand homeland security architecture to be designed as an attractive amenity to a public space and not like a fortification.

C. LITERATURE REVIEW

There are several academics researching the impact of homeland security architecture on the urban environment.[17] Overall, the literature agrees on the importance of aesthetics to the human spirit. Design influences human emotions and there is a disconnect between urban design and homeland security professionals that still exists all these years after 9/11. Most significantly, the dialogue on aesthetics and homeland security architecture is one-sided. Security professionals have not joined the conversation or are even seemingly aware that one is occurring.

1. Civic Architecture and Public Realm Use before 9/11

All architecture communicates a message about the purpose of a space, the prestige of those who use or own the space, and the values associated with its users and owners. U.S. public architecture has embodied the American values of civic participation

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[17] See Coaffee, "Rings of Steel," Silberberg "Boston's Public Realm," and Graham, *Cities under Siege*.

and public open spaces since the first immigrants began laying out settlements. Americans designed public buildings, including the Capitol Building and the White House, to be open and welcoming (Chapter II expands on the intersect of architecture and political messaging). Yet, even the messaging transmitted by carefully designed public buildings can be overwritten by a powerful political agenda. For example, Albert Spear, a German architect who became a minster for the Third Reich, designed many new public buildings for Berlin similar to the neo-classic public buildings in America. Spear's *Volkshalle* looks eerily similar to buildings in America's capital. (Figure 1). Yet the xenophobic political agenda of the Nazi party is so abhorrent that most of Spear's designs were never built and no buildings of Spear's remain in Berlin.

The *Volkshalle* was designed in 1937 for the new Berlin. Albert Speer, often referred to as Hitler's architect, designed a Third Reich public building that bore a strong resemblance to the U.S. Capitol. Yet because of his association with Hitler and the values of the Nazi party, Speer's design carries a negative connotation that is opposite from American civic architecture.

Figure 1. The *Volkshalle* (Hall of the People)[18]

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[18] Source: Digital image, Amazon S3, accessed September 16, 2017, https://s3.amazonaws.com/ cms.ipressroom.com/175/files/20162/56fad7ab602274efab71abe9_Speer+Architecture/Speer+Architecture _1e1bb966-ed9f-4f81-97eb-95e3094fdfd1-prv.jpg.

On the other hand, the U.S. Capitol Building, compared to Speer's *Volkshalle*, elicits an opposite reaction from visitors. Patricia Leigh Brown, a *New York Times* writer, stated, "In contrast to Europe, where palaces [where the business of government was conducted] come fortified, America's openness and accessibility have always been by design."[19] This quote appeared in a 1995 article discussing the conflict between the White House's architecture and the first temporary barricades installed shortly after the Oklahoma City bombing. Later in the article, Brown quotes Stephen Kliment, editor of the *Architectural Record*, who wondered—six years before the terrorist attacks of 9/11— if "terrorism as a determinant of architectural form" would become the new style. Brown choosing to title her article "Design for a Land of Bombs and Guns" foreshadowed the greater impacts of 9/11 on the American urban landscape.

Apart from Oklahoma City's Alfred P. Murrah Federal Building bombing in 1995 and the World Trade Center bombing in 1993, the United States had very little experience with terrorist attacks on domestic soil. Therefore, the need to protect messages communicated by public architecture had yet to surface.

2.   The Public Realm after 9/11

One of the fundamental roles of a government is to protect its citizens. This protection occurs through physical safety, financial security, and quality of life. Yet changes to the public realm can impact these areas. Since the terrorist attacks of 9/11, the challenge of balancing public safety and open spaces has increased for public space managers. This literature review researched how the United Kingdom adapted its approach to homeland security architecture from a fortress approach in Belfast to a more aesthetical approach in London following a series of terrorist attacks against the city in the 1990s.

Jon Coaffee aptly chronicled the United Kingdom's modern approach to homeland security architecture design after Belfast. Coaffee, one of the leading academics in the United Kingdom studying the impacts of terrorism on the public realm, is the director of the Resilient Cities Laboratory in England and an exchange professor at

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[19] Patricia Leigh Brown, "Designs for a Land of Bombs and Guns," *New York Times*, May 28, 1995.

New York University's Center for Urban Science. He has authored papers on resilience, design, and the urban environment, which have been published in numerous disciplines such as urban planning, political science, civil engineering, and geography. Coaffee's body of work encompasses the evolution of homeland security architecture in the United Kingdom, from the early, fortress-like security structures built in northern Ireland during the decades of sectarian violence to the United Kingdom's contemporary aesthetical homeland security architecture. Coaffee's books and articles appear as references in many of the sources used in this literature review.[20]

One of Coaffee's articles, "The Visibility of (In)security: The Aesthetics of Planning Urban Defences against Terrorism," explores how anti-terrorism architecture provides a "transmission of symbolic messages" to various stakeholders. Coaffee goes on to explore how "art, architecture, and other visual phenomena might reflect dominant political ideologies."[21] The article highlights the impacts of security architecture on the public realm of Belfast. The fences, walls, and security checkpoints the British created to prevent terrorist attacks in Belfast's city center became known as the Ring of Steel. Coaffee looked to Belfast as a cautionary tale for Western governments reacting to the terrorist attacks of 9/11. He further states in the article "Rings of Steel, Rings of Concrete and Rings of Confidence: Designing out Terrorism in Central London pre- and post-September 11th":

> September 11th also brought to the fore wider concerns about different types of "postmodern" or "catastrophic" terrorism … In the post-September 11th world reconceptualized terrorist realities have led, in some cases, to new and dramatic urban counter-responses based on Belfast and LA-style fortification as well as increasingly sophisticated military threat-response technology.[22]

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[20] See Rachel Briggs, "Invisible Security: The Impact of Counter-terrorism on the Built Environment," in *Joining Forces: From National Security to Network Security*, 68–90 (London: Demos, 2005); Silberberg, "Boston's Public Realm"; The Royal Institute of British Architects, *RIBA on Designing for Counter-terrorism* (London: RIBA, 2010).

[21] Jon Coaffee, "The Visibility of (In)security: The Aesthetics of Planning Urban Defences against Terrorism," *Security Dialogue* 40, no. 4–5 (2009): 491.

[22] Coaffee, "Rings of Steel," 201.

According to Coaffee, the post-9/11 world saw a return to Belfast-style counterterrorism security measures. Architecture's ability to communicate political messages in addition to the overall importance of design aesthetics is supported by other academic disciplines such as architecture and environmental design. Yet this important connection between architecture and politics does not seem to have taken a firm hold in American homeland security architecture.

The literature reviewed for this thesis indicates the United States could benefit from studying the lessons from the United Kingdom, in particular Belfast, and the move toward creating homeland security that is aesthetical in London and other cities. The absence of a universal approach to homeland security architecture in the United States has caused public open spaces to suffer since 9/11. Architect Witold Rybczynski, professor of urbanism at the University of Pennsylvania, described the impacts to *Washington Post* reporter Petula Dvorak as bollards becoming the "steel crab grass" of modern cities.[23] Without established design criteria, improvised security measures were hastily installed around federal facilities and potential high-risk targets such as stadiums and courthouses. As Patricia Leigh Brown also indicates, "Barricades and bollards have become the newest accessory on this country's psychic frontier."[24] Other writers and researchers, like Jeremy Németh and Justin Hollander, have also attempted to quantify the loss of public open space in New York and Boston. Further, John Mueller, chair emeritus of security studies at the Ohio State University, attempted to evaluate the benefits of investing in homeland security architecture. Mueller concluded that since the number of potential terrorist targets is unlimited and terrorists can easily choose to attack an unprotected site over a protected site, homeland security architecture makes sense in only limited cases.[25] While the loss of public space does not directly speak to the

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[23] Petula Dvorak, "Ubiquitous Security Barriers Get a Fashionable Flourish," *Washington Post*, January 29, 2006.

[24] Patricia Leigh Brown, "Ideas & Trends: Designs for a Land of Bombs and Guns," *New York Times*, May 28, 1995.

[25] John Mueller, "Assessing Measures Designed to Protect the Homeland," *The Policy Studies Journal* 38, no. 1 (2010).

questions of aesthetics, it does support the significant impact homeland security architecture has on the public realm.[26]

As such, more research must be conducted in the United States on the emotional impacts of security measures designed without consideration to aesthetics in the public realm. There are academic journal articles concerning the impact of 9/11 on the visual arts and popular culture that could provide important insights for this thesis. Exploration of the urban geography discipline could provide additional context for discussing the importance aesthetics play in daily life. Aesthetics elicit emotions, can enhance or reduce fear, communicate histories, and inform worldviews. Roland Bleiker, professor of international relations at the University of Queensland, has published work on the lack of consideration given to emotions in scholarly analyses of terrorism. Bleiker states in an article discussing art after 9/11, "Prevailing scholarly analyses and policy approaches to global security certainly pay no attention to the role of emotions, even though terrorism is a highly emotional issue."[27] In addition, Bruce Schneier explored other emotional factors to consider in terrorism responses, stating, "You can be secure even though you don't feel secure. And you can feel secure even though you're not."[28] According to Schneier, "Security is both a feeling and a reality. And they are not the same."[29] From Bleiker and Schneier's perspectives, the importance of emotional response to terrorism and terrorism countermeasures (homeland security architecture) needs to be a bigger part of the American homeland security dialogue.

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[26] Jeremy Nemeth and Justin Hollander, "Security Zones and New York's Shrinking Public Space," *International Journal of Urban and Regional Research* 34, no.1 (2009): 20–34, doi:10.1111/1468-2427.2009.00899.x; Silberberg, "Boston's Public Realm."

[27] Roland Bleiker, "Art after 9/11," *Alternatives: Global, Local, Political* 31, no. 1 (2006): 78.

[28] Bruce Schneier, "The Psychology of Security," in *Progress in Cryptology—AFRICACRYPT 2008*, ed. Serge Vaudenay (Berlin: Springer-Verlag, 2008), 50, https://www.schneier.com/academic/paperfiles/paper-psychology-of-security.pdf.

[29] Ibid.

### 3.	Homeland Security Architecture Design

Today, there is an abundance of urban design manuals for homeland security architecture in the United States produced by both the private and public sectors. All the design manuals similarly emphasize the role of aesthetics in homeland security architecture and highlight the opportunity homeland security architecture provides to improve public spaces. For instance, the National Capital Planning Commission (NCPC), a federal planning agency concerned by the prevalence of "unsightly and makeshift security barriers that are negatively impacting the historic beauty of Washington, DC," was charged with preparing a comprehensive security plan designed to make the U.S. capital safe and retain the beauty of its streetscapes.[30] The plan offers guidance on replacing the ad-hoc security measures that were rapidly installed around various federal agencies after 9/11. The National Capital Urban Design and Security Plan, published in 2002, contained site-specific recommendations for incorporating permanent security barriers that "would restore the beauty of the nation's capital by integrating building perimeter security into an attractive streetscape."[31] The Commission hoped its recommendations would be applied in other jurisdictions across the nation and would retain the American idea of equality by maintaining "a free and open society" whose "public realm expresses those values."[32] This should be the goal of all open spaces in the American public realm.

In addition to the NCPC's work, the Federal Emergency Management Agency (FEMA) produced a report titled *Site and Urban Design for Security: Guidance against Potential Terrorist Attacks* in 2007 to further assist the design community and public agencies in creating attractive, secure public spaces. Chapters of the manual discuss security designs in dense central business districts, and designing security installations

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[30] This interagency security task includes presidential appointees, the General Service Administration, the professional design community, historic preservation officers, security experts, and private citizens with a wide variety of backgrounds. See National Capital Planning Commission (NCPC), *National Capital Urban Design and Security Plan* (Washington, DC: NCPC, 2004), iii, https://www.ncpc.gov/Document Depot/Publications/SecurityPlans/NCUDSP/NCUDSP_Section1.pdf.

[31] FEMA, *Site and Urban Design for Security: Guidance against Potential Terrorist Attacks* (FEMA 430) (Washington, DC: Department of Homeland Security, 2007), 2-24, Table 2-5.

[32] (NCPC), *National Capital Urban Design and Security Plan*, iii.

that enhance the streetscape and the public's experience of urban areas. Adding such security measures should be viewed as a chance to improve aesthetics rather than as a fortification measure.[33]

Unlike in the United Kingdom, however, the design guidance provided in these manuals has not reached the broader audience of design professions responsible for the aesthetics and safety of the American public realm. The main organizations responsible for setting standards and providing guidance on designing open spaces in public rights of way, including the National Association of City Transportation Officials and the U.S. Department of Transportation, do not provide any recommendations for public agencies on how to address aesthetics in homeland security; in fact, they surprisingly do not reference homeland security architecture at all.[34] The disconnection between those entrusted with managing public spaces and design resources that could guide security decisions continues more than fifteen years after 9/11. Chapter V discusses the role of these agencies as public realm custodians and illustrates the significance of homeland security design guidance not reaching the transportation sector.

D.   SIGNIFICANCE OF THE RESEARCH

Architecture has sociological, psychological, and cultural effects, as well as security impacts, but there is little related research or discourse in the United States.[35] Calls for an empirical methodology for measuring the psychological impacts of public realm architecture date back to late 2007, yet a common research method has not been adopted.[36] However, disciplines such as urban planning, urban geography, environmental

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[33] FEMA, *Site and Urban Design for Security*, 6.18–6.21.

[34] Barbara McCann and Suzanne Rynne, *Complete Streets* (PAS 559) (Washington, DC: American Planning Association, 2010); National Association of City Transportation Officials, *Urban Street Design Guide* (Washington, DC: Island Press, 2013); "Manual on Uniform Traffic Control Devices," Department of Transportation, last modified August 1, 2017, https://mutcd.fhwa.dot.gov/.

[35] For the purposes of this thesis, architecture is the art or practice of designing and constructing buildings or structures.

[36] Jeremy Nemeth and Stephan Schmidt, "Toward a Methodology for Measuring the Security of Publicly Accessible Spaces," *Journal of the American Planning Association* 73(2007): 283–297.

psychology, architecture, history, and sociology can help create a framework for evaluating the lasting effects of homeland security architecture.[37]

In the immediate aftermath of 9/11, security measures were erected quickly without regard to their impacts on the public. According to the American Planning Association:

> Security and anti-terrorism concerns have encouraged property owners, government entities, and others to install security barriers, to limit street access, and to install a wide variety of devices on sidewalks, buildings, and transportation facilities. … Over time, these same installations have an adverse impact upon the physical, social, economic, and civic life of our communities.[38]

The United States can learn from the United Kingdom regarding public realm security design. The introduction to the United Kingdom's *Integrated Security: A Public Realm Design Guide for Hostile Vehicle Mitigation* states, "The design of the public realm must consider the application of security measures holistically, to ensure that the correct level of protection is provided without compromising the ability to create aesthetic and functional public spaces."[39] The way forward in America could be to learn from the example of the United Kingdom's past.

E.   POTENTIAL EXPLANATIONS AND HYPOTHESES

This thesis proposes that the lack of consideration for aesthetics in homeland security architecture is a consequence of its origins. Security professionals charged with keeping the public safe in the immediate aftermath of 9/11 used tools already familiar to them (such as barricades; see Figure 2). It is possible that if design professionals had been tasked with solving the same security problem, very different tools would have been used—tools that considered aesthetics when solving a problem.

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[37] "Urban geography is a branch of human geography concerned with various aspects of cities. An urban geographer's main role is to emphasize location and space and study the spatial processes that create patterns observed in urban areas." Amanda Briney, "An Overview of Urban Geography," *ThoughtCo*, last revised February 28, 2017, https://www.thoughtco.com/overview-of-urban-geography-1435803.

[38] "APA Policy Guide on Security," American Planning Association (APA), March 20, 2005, https://www.planning.org/policy/guides/adopted/security.htm.

[39] Centre for the Protection of National Infrastructure (CPNI), *Integrated Security: A Public Realm Design Guide for Hostile Vehicle Mitigation*, 2nd edition (London: CPNI, 2014), 1.

Figure 2. Temporary Concrete Barriers and Orange Plastic Traffic Barrels Used
to Redirect Traffic for a Transportation Project in Washington, DC[40]

F.   RESEARCH DESIGN

The research examined large cities that have experienced terrorist attacks, such as London and New York. Locations retrofitted with homeland security architecture after 9/11 are emphasized because modifications to existing structures provided a larger sample. Further, the agencies, organizations, and professionals who have a role in advancement of homeland security architecture were identified. For future research, conducting a broader survey of homeland security installations and the public agencies responsible for reviewing construction would be ideal to understand the full scale and impacts to the public.

1.   Selection

Cities do not specifically track homeland security installations as they might track new schools or added retail space. When there is available research, it is narrowly focused to a geographic area, such as a central business district. Nonetheless, there were

[40] Source: "Barrera," Flickr digital image, posted by "Daniel Lobo," May 29th, 2011, www.flickr.com/photos/daquellamanera/5846085223.

themes and commonalities among urban areas, such as the prevalence of "temporary" security measures installed post-9/11 and the decline or restriction of public spaces.

However, given time constraints and this thesis's scope, an extensive survey was not feasible. Instead, the role of public spaces in democratic societies was examined, along with the influence of economics and politics on homeland security architecture, and the research attempted to explain how the psychology of fear influences people's response to unpredictable threats. Again, given time and scope, this review is generally summarized, except where corollaries are worthy of emphasis.

2.   Data Sources

Primary sources included organizational design guidelines and best institutional practices. Secondary sources included newspaper articles, academic articles, and texts on architecture, urban design, environmental psychology, sociology, homeland security grants, and aesthetics.

This writer found that newspapers and academic journal articles from the United States provided important context for this thesis, as they report on the continued impacts to the public realm caused by the increased frequency of terrorist attacks as they occur. Specifically, fear of the last terrorist attack and anxiousness for the next one influence how America designs and uses public spaces. Newspapers and journal articles raised similar concerns regarding a perceived reactionary response to terrorism, including the loss of public open space, restrictions to public access, and the potential conflicts between homeland security architecture and American democracy.

However, the United Kingdom provides historic support for this thesis's hypothesis. The United Kingdom experienced terrorist attacks in urban settings for thirty years before 9/11 (in both northern Ireland and England). Examining homeland security architecture design guides and the agencies that influence design in the United Kingdom offers a road map for America to move toward more aesthetical homeland security architecture.

3. Analysis

There have been attempts to create a metric for measuring the impacts of homeland security installations, such as through loss of public open space and the closure of midblock passages in Boston.[41] Another study attempted to measure impacts by severity.[42] Because there is no accepted standard, this thesis surveyed current practices, identified gaps between the knowledge of the aesthetic principles and their application to homeland security architecture, and identified some solutions used in the United Kingdom.

4. Output

This thesis is a starting point for broader awareness and discussion within the emerging discipline of security design about the importance of aesthetics. The thesis also introduces other factors that might influence homeland security architecture decisions, such as economics and the quest for prestige. Lastly, it is hoped that the academic fields of design, urban planning, and homeland security studies develop interdisciplinary curriculum that fosters a common understanding of form and function. Good urban design and homeland security architecture are not incompatible. The goal of both design and security is to provide a service to the public. If designed well, homeland security architecture should disappear into the urban landscape.

G. CHAPTER OUTLINE

This thesis is structured to offer other topics of importance for consideration that either directly or indirectly contribute to the hypothesis. Chapter II briefly addresses the history of the public forum, the importance of public space in the expression of our constitutional rights to assembly, and the psychological impacts of homeland security architecture. Chapter III considers the economics and prestige driving homeland security design decisions. Chapter IV reviews the design guides and policies created after 9/11 and the role of professional associates in shaping the aesthetics of homeland security

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[41] Silberberg, "Boston's Public Realm," 246.

[42] Nemeth and Schmidt, "Measuring Security."

architecture. Chapter V presents the current state of homeland security architecture in the United States and offers recommendations for improving aesthetics in U.S. homeland security. Chapter IV presents the thesis conclusion.

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II.   FORM, FORUM, AND FEELINGS OF INSECURITY

It is easy to underestimate the importance of attractive and accessible public spaces when weighed against the threat of a terrorist attack. Who cares about aesthetics if people are safe? Research on aspects of aesthetics like color and use of natural elements provides evidence to support the impact of aesthetics on levels of anxiety, feelings of isolation, and sense of community. The application of homeland security architecture without consideration of aesthetics, as this chapter illustrates, impacts democratic principles in three significant areas: open spaces as historic venues for public discourse, public design that reflects American values of freedom and the pursuit of happiness, and the right to live free from fear.

A.   OPEN SPACES AND CIVIC ENGAGEMENT

> [Public open spaces] reflect the values of our culture of openness and
> freedom.
>
> —Barbara Nadel, American Institute of Architecture[43]

Cities were originally formed in part to provide safety and security to their inhabitants. Ancient city walls protected residents from marauders, attacking armies, and wild animals. The close proximity of people in cities also provided an environment for the exchange of ideas and knowledge that led to the creation of universities and the fine arts. "This balance of security and civility is as old as urbanism itself," according to Susan Silberberg, Boston architect and city planner.[44] A characteristic of a thriving city is its "citizens' ability to gather and move freely about the city, and be part of a larger community … supported by openness and accessibility, which are the hallmarks of public spaces in democratic societies."[45] Ancient Greece, one of the earliest democracies, is

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[43] Ray A. Smith, "Builders Try to Make More Secure Towers That Please the Eye—Questions of Aesthetics, Attacks Highlight the New Paradigms For Post-Set. 11, 2001, Designs," *Wall Street Journal Europe*, February 19, 2003.

[44] Silberberg, "Boston's Public Realm."

[45] Ibid.

replete with examples of thriving democratic cities. Citizens gathered frequently to interact, engage in commerce, and discuss philosophies in public spaces.

Democracy in America is built on Greek attributes. The word agora is Greek for "open place of assembly."[46] In early Greece, the agora was "designated the area in the city where free-born citizens could gather to hear civic announcements, muster for military campaigns or discuss politics."[47] Eventually, "the agora defined the open-air, often tented marketplace of a city".[48] The Greek concept of a central public open space "has been a distinguishing characteristic of European cities in one form or another for over two thousand years."[49] Given the importance of open spaces for assemblies in European culture, the concept of public civic space was replicated in the United States.

In early American villages and towns, the agora was manifested as town squares, public commons, and courthouse squares. These public open spaces were used for community celebrations, holiday gatherings, farmer's markets, political speeches, and rallies. The founding fathers recognized the importance of town squares and village commons for open political debate and public discourse; protecting this right to assemble became the First Amendment to the Constitution. Gregory Smithsimon writes, in an article on the right to public space, "Many of the commonly defended human rights (freedom of expression, of assembly of information, of movement), depend on the availability of physical public space."[50] In recent years, public squares across the country have played a significant role in the Occupy Movement, marriage equality protests, the Black Lives Matter demonstrations, and the 2016 presidential election (see Figures 3 and 4) These expressions of civic engagement are sometimes planned and coordinated and at other times are spontaneous responses to national or world events. In all cases, public spaces played a role in voicing constitutionally protected rights.

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[46] Joshua J. Mark, "Agora," *Ancient History Encyclopedia*, September 2009, www.ancient.eu/agora.

[47] Ibid.

[48] Ibid.

[49] Suzanne H. Crowhurst Lennard, "Genius of the European Square," International Making Cities Livable, December 2004, http://www.livablecities.org/articles/genius-european-square.

[50] Gregory Smithsimon, 'The Right to Public Space," Metropolitics, March 10, 2015, www.metro politiques.eu/The-Right-to-Public-Space.html.

Figure 3. Marriage Equality Act Supporters and Protestors Exercising First Amendment Rights at a St. Paul, Minnesota, Court House in 2013[51]

Figure 4. 2014 Protest against the Israeli Invasion of Gaza at Westlake Park in Seattle, Washington[52]

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[51] Source: "Discussions at the Same Sex Marriage Vote in the Minnesota Senate," Flickr digital image, posted by "Fibonacci Blue," May 14, 2013, www.flickr.com/photos/fibonacciblue/8737747090.

[52] Source: "Gaza Protest Seattle 7.19.14," Flickr digital image, posted by "Doug Barnes," July 19, 2014, www.flickr.com/photos/55747144@N04/14673238486/.

Working against the public's guaranteed freedom to assemble, homeland security architecture creates physical barriers in cities between people on the outside and people on the inside—physical barriers between the public and open spaces where they might gather. Jeremy Nemeth, director of urban design at the University of Colorado, asserts, "Public space ideally promotes active citizenship by encouraging exchange and dialogue, where users deliberate opposing viewpoints."[53] Americans have a long history of expressing support or opposition to government actions by gathering in public open spaces. Suffragette parades and rallies helped persuade the government to pass the 19th Amendment, freedom marches in the 1960s led to the passage of the anti-discrimination laws, and recent marches led to the passage of marriage equality; access to public open spaces is vital to the survival of a democracy. If a democracy is ruled by the people, the people need to be able to force changes in laws and practices by collectively voicing their will when their elected officials refuse to act. The United States needs to reevaluate the current balance between security agendas and civil liberties.

B.   ARCHITECTURE AND POLITICAL MESSAGING

Architecture is inescapably a political art, and it reports faithfully for ages to come what the political values of a particular age were.

—Senator Daniel Patrick Moynihan[54]

Architecture, like other forms of the visual arts, is designed to convey a message. Alison Lurie's book *The Language of Houses—How Buildings Speak to Us*, explores the communication between architecture and its audience. Lurie writes, "In many ways it is a more universal language than words, since it uses three-dimensional shapes, colors, and textures rather than words."[55] In an academic paper titled "Architecture as an Expression of Political Ideology," Alice Sabrina Ismail states, "Architecture is a sign system, a

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[53] Jeremy Nemeth, "Controlling the Commons: How Public is Public Space," *Urban Affairs Review* 48, no. 6: 812.

[54] "These Barriers to the White House Must Not Stand," *Washington Post*, April 25, 2017, https://www.washingtonpost.com/.

[55] Alison Laurie, *The Language of Houses –How Buildings Speak to Us* (New York: Delphinium Books, 2014), 1.

means of communication analogous to verbal or written language."[56] Public buildings across the country were built in the Greek revival and neoclassical style characterized by grand entrances, soaring Greek columns, lofty domes, and facades filled with windows (see Figures 5 and 6). The style of Greek revival and neoclassical architecture "is looked on as the expression of local nationalism and civic virtue."[57] The political messages communicated by these grand public buildings show that America is a proud and enlightened country with a political system whose roots can be traced back to the ancient Greeks. America welcomes and encourages her citizens to actively participate in their government—a government Abraham Lincoln famously described in the Gettysburg Address as being created by the people and for the people.

Built circa 1849–1850, the large doric columns create a grand portico where citizens can gather. The facade contains an octagonal cupola and a double row of sash windows.

Figure 5. Madison County Courthouse in Richmond, Kentucky[58]

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[56] Alice Sabrina Ismail, "Architecture as an Expression of Political Ideology" (Universiti Teknologi Malaysia, August 13, 2010), 2.

[57] *Wikipedia*, s.v. "Greek Revival Architecture," accessed September 7, 2017, https://en.wikipedia.org/wiki/Greek_Revival_architecture.

[58] Source: "Madison County Courthouse, Richmond, KY," Flickr digital image, posted by "Mark," June 9, 2011, https://www.flickr.com/photos/61073993@N04/5816977173/.

Built circa 1908, the courthouse has a welcoming, opening space leading to wide stairs and large double doors. Multiple windows imply transparency, while the dome implies heavenly work occurs in the building. Image used with permission by Jimmy Emerson.

Figure 6. Hancock County Courthouse in Cathage, Illinois[59]

The approach to these grand buildings sets the scene for citizens to interact with their government. Are visitors welcome? Will they be treated with respect? Are they in a safe place? Within these buildings justice is administered, laws are created, and the basic needs of citizens are met by their government. If the building's approach has been modified with concrete barriers and bollards, the architecture's message is muted or altered.

Architecture and politics have always been intertwined in a broad sense. *New York Times* writer Alan Riding stated:

No less than, say, the Egyptian pyramids, Europe's great Gothic cathedrals were conceived as expressions of power. Similarly, both Albert Speer's

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[59] Source: "Hancock County Courthouse," Flickr digital image, posted by "Jimmy Emerson, DVM,". May 7, 2010, https://www.flickr.com/photos/auvet/4600181880/in/album-72157623911501957/.

grandiose design for Hitler's Berlin and 1960s efforts to bring social improvement through public housing were politically inspired.[60]

According to Jon Coaffee, an international expert in urban resiliency, "the state is, in many regards symbolically weakened by terrorist attacks," and homeland security architecture is in part an attempt to "demonstrate the state's ability to afford protection to its citizens."[61] In cities across the country the message from governments "is clear and is being disseminated widely: the defence of the city—of the places where people work, relax and live—is central to wider national security strategies."[62] If homeland security architecture appears haphazard or reactionary, it communicates the wrong message about the government's ability to protect its citizens.

C.   PSYCHOLOGY AND SECURITY

> We shape our buildings and afterwards our buildings shape us.
>
> —Winston Churchill[63]

Environmental psychologists study the interplay between individuals and their surroundings. Consumer behaviorists study how colors, shapes, textures, sounds, and smells impact our experience of our surroundings. Both disciplines can help explain how spaces marred with concrete, security fencing, or physical barriers might send signals to the brain that a person is entering at best an unwelcoming space, at worst a potentially dangerous environment.

Homeland security architecture is primarily designed to mitigate the effects of a terrorist attack.[64] It is the "hardening" of a soft target. What happens when the urban environment becomes visibly fortified with security measures? How do people feel in hardened spaces?

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[60] Alan Riding, "Are Politics Built into Architecture?" *New York Times*, August 10, 2002.

[61] Coaffee, O'Hare, and Hawkesworth, "Invisibility of (In)security."

[62] Ibid.

[63] "Churchill and the Commons Champter," UK Parliament, accessed September 16, 2017, http://www.parliament.uk/about/living-heritage/building/palace/architecture/palacestructure/churchill/.

[64] Kevin R. Grosskopf, "Evaluating the Societal Response to Antiterrorism Measures," *Journal of Homeland Security and Emergency Management* 3, no. 2 (2006): Article 1.

The effect is not neutral. A study published in the *Journal of Homeland Security and Emergency Management* found, "Within the context of traditional crime … visible security measures appeared to be well received," yet when exposed to many of the "same measures within the context of terrorism, the vast majority of respondents felt tense, suspicious, and fearful."[65] Grosskopf hypothesizes the reaction to visible terrorist security measures (homeland security architecture) could be related to the unpredictability of terrorist attacks. The public accepts or at least expects some level of crime, but rejects the ordinariness of terrorist attacks.

Other disciplines are thinking about the impacts of homeland security architecture on the public psyche. Internationally renowned security technologist Bruce Schneier, notable for coining the phrase "homeland security theater" (the phenomenon of making people feel more secure without actually improving security), has authored several papers on the psychological impacts of terrorism on the public.[66] Scheneier states:

> Security is both a feeling and a reality … when people are scared; they need something done that will make them feel safe, even if it doesn't truly make them safer. Politicians naturally want to do something in response to a crisis, even if that something doesn't make any sense.[67]

The addition of blatant security measures in public spaces can evoke defensiveness, suspicion, paranoia, and insecurity.[68] Peter Marcuse, a professor of urban planning, has argued that the emphasis on homeland security architecture and urban securitization can lead to "a form of existential insecurity, the human, psychological sense of pervasive danger, a deep and fundamental threatening anxiety, without a sharp focus on a specific danger."[69] While the risk of being a victim of a terrorist attack is remarkably low compared to other risks, the negative psychological impacts appear to be high in contrast to the ability of aesthetic spaces to elicit feelings of calmness and happiness.

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[65] Grosskopf, "Antiterrorism Measures," 8.

[66] Bruce Schneier, "Beyond Security Theater," *Schneier on Security*, November 13, 2009, https://www.schneier.com/blog/archives/2009/11/beyond_security.html.

[67] Schneier, "Psychology of Security," 11–12.

[68] Coaffee, O'Hare, and Hawkesworth, "Invisibility of (In)security."

[69] Peter Marcuse, "Security or Safety in Cities? The Threat of Terrorism After 9/11," *International Journal of Urban and Regional Research* 30, no. 2 (December 2006): 919–929.

Americans may tolerate feelings of insecurity if they add some predictability to an unpredictable world. In other words, low levels of fear and anxiety about terrorism become normalized. According to Schneier, "there is no such thing as absolute security, and any gain in security involves some sort of trade-off."[70] Why, then, are Americans willing to accept obtrusive homeland security architecture? People are more afraid of risks that can kill them in "particularly awful ways, like being eaten by a shark, than they are of the risk of dying in less awful ways, like heart disease," says Schneier.[71] The risk of dying from a terrorist attack is extremely low. The insurance industry estimates the chances are "1 in 20 million of being killed by a terrorist attack," while heart disease—the leading cause of death in America—is 1 in 4.[72] Across the country, millions of dollars are being spent to add homeland security architecture in public spaces to protect against a 1-in-20-million chance of a terrorist attack. Roger Lewis, professor of architecture at the University of Maryland, states, "We're spending a lot of money doing this stuff to give people a sense of security and psychic comfort but in fact come of these security measures are really placebos."[73] Not only can homeland security architecture restrict access to public spaces, it might not actually make the public safer. The indirect costs of poorly designed homeland security architecture include limitations on the right to assemble and, by evoking feelings of fear or anxiety, they affect the achievement of happiness itself.

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[70] Schneier, "Psychology of Security," 51.

[71] Ibid., 54.

[72] "Deadly Statistics," Life Insurance Quotes, accessed September 7, 2017, www.lifeinsurance quotes.org/additional-resources/deadly-statistics/.

[73] Smith, "Secure Towers."

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III. THE ECONOMICS AND PRESTIGE OF AN EXPANDED SECURITIZED NATION

Economics and the power of prestige, as well as a fear of terrorism, play a role in homeland security. Economics can be understood to encompass consumption, power, and material prosperity, while prestige is associated with a sense of importance based on one's achievements or level of quality. Based on these definitions, there is an assumption that the most important places, like financial institutions or national monuments, are the most desired terrorist targets. It is also reasonable to assume, given the billions of dollars allocated each year in the United States for homeland security, that economics influence how these dollars are distributed. While it might be acceptable to compromise aesthetics for security, compromising aesthetics for profit is not. It is important for the public to understand the difference. To test these assumptions, this chapter examines how economics and homeland security architecture intersect in the marketing of military-type products for domestic use, as a marketing tool to attract affluent tenants, businesses, and tourists, and in the competition for homeland security grants.

A. DESIGN FOLLOWS THE DOLLAR

Defense contractors first began marketing their services to solve domestic problems after World War II. By the 1950s, defense researchers from organizations such as RAND started publishing articles in the *Journal of the American Institute of Planners* and the *Public Administration Review* suggesting how techniques and technologies from military operations research might benefit city administrations.[74] Large military contractors and agencies such as Lockheed Martin and NASA began working for state and local governments to help diversify their portfolios in the Cold War era.[75]

Meanwhile, other manufacturing sectors seized the opportunity to fill the immediate need for homeland security architecture by adapting their products. In an

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[74] Jennifer Light, "Urban Security from Warfare to Welfare," *International Journal of Urban and Regional Research* 26, no. 3 (2002), 607–613.

[75] Ibid.

article in the *Washington Post*, David Dickinson, senior vice president of Delta Scientific, recalls making quick edits to brochures the company was designing on traffic control bollards on 9/11. Dickinson stated, "The moment we heard about the attacks we decided to put a crash-test photo in the brochure."[76] The image of the crash test showed bollards stopping runaway vehicles in a parking garage. The photo implied these bollards could stop or lessen the impact of a terrorist attack. The company's products were quickly remarketed as a tool to prevent terrorists from using vehicle-borne explosives—bollards to stop bombs (see Figure 7). The simple addition of a well-placed photo led to Delta Scientific's orders tripling overnight in the post-9/11 rush to prevent vehicle bombings of potential targets.[77] Tellingly, there was no specific terrorist target, which ostensibly made everything a potential target. As a whole, the private sector responded to the fear of a terrorist attack after 9/11 in much the same way as government agencies did—with bollards and barriers.

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[76] Petula Dvorak, "Ubiquitous Security Barriers."

[77] Ibid.

This courthouse shows an example of homeland security architecture added to the public sidewalks of an urban setting. The abundance of security bollards compromises the aesthetics of the public spaces.

Figure 7. Federal Courthouse in Seattle, Washington[78]

The commercial property market, another private industry, responded to 9/11 similarly. In order to attract and retain the most lucrative clients, facilities must be constantly upgraded with the latest amenities. Most people have a choice of where to work and live. Two of the most basic human desires are to feel safe and to be held in esteem (prestige).[79] In the post-9/11 world, homeland security architecture can help fulfill these desires. Successful marketers know the importance of appealing to these basic needs. There are professional organizations and journals dedicated to branding and marketing. Jon Coaffee and Peter van Ham, guest editors for a special edition on homeland security architecture in *Place Branding and Public Diplomacy*, introduce the

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[78] Photo by author, September 2015.

[79] Abraham Maslow's theory of human motivation identified the top five needs humans strive to obtain: survival, safety, social, esteem, and fulfillment. See, e.g., Robert Evans Wilson Jr., "Pack Mentality," *Psychology Today*, December 9, 2009, https://www.psychologytoday.com/blog/the-main-ingredient/200912/pack-mentality.

volume with an editorial entitled "Security Branding: The Role of Security in Marketing the City, Region or State."[80] The editorial discusses the damage that perceptions of insecurity from crime or vulnerability to a terrorist attack can have on a place's image in today's political and economic climate. The remedy is successful place branding:

> Amidst an almost constant stream of government announcements and media headlines purporting to highlight the omnipresent risk that society now faces and the culture of ambient fear this engenders, emerging safety concerns and security threats are, we argue, rapidly unlocking the potential for security to become a key selling point in the practice of place branding.[81]

Place branding professionals can counter negative perceptions or promote positive images of prestige and security to attract businesses, boost tourism, and contribute to real estate transactions. Place branders are economic gladiators skilled in overcoming perceptions of insecurity. If given the choice between two locations, the addition of enhanced security features or homeland security architecture can be a deciding factor in selecting one place over another. Homeland security architecture added to retail spaces can become a unique selling point (an attribute presented by a seller as the reason that one product is superior over the competition's).[82] Property managers who know that clients want the latest amenities and safety features need to consider homeland security architecture as a selling point. Perhaps the new corner office, for instance, needs to contain blast-resistant glass.

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[80] Jon Coaffee and Peter van Ham, "'Security Branding': The Role of Security in Marketing the City, Region or State," *Place Branding and Public Diplomacy* 4 (2008): 191–195.

[81] Ibid., 191.

[82] *Entrepreneur Small Business Encyclopedia*, s.v. "Unique Selling Position," accessed September 7, 2017, https://www.entrepreneur.com/encyclopedia/unique-selling-proposition-usp.

B.   DEFENSE SPENDING

> Juxtaposing the most recent mobilization efforts to provide urban security on American soil alongside analogous episodes from the nation's past reminds us that many powerful economic and political interests are well-served by the unbridled expansion of urban fear.

—Jennifer S. Light[83]

Domestic security constitutes a sizeable portion of defense spending. As early as the 1950s, defense contractors were rebranding their services and products to serve a domestic market. Companies realized the end of World War II would necessitate developing new markets and uses for their products. While America's involvement in the Korean and Vietnam Wars caused the need for bigger defense budgets, the terrorist attacks of 9/11 created the greatest influx of defense spending since World War II.[84] In the decade after 9/11, homeland security spending increased an astounding 301 percent, from $16 billion to $69.1 billion.[85] Officially known as the "domestic homeland security and public safety market," its spending is estimated to reach $81 billion by 2018.[86]

With so much money at stake, the private sector responded quickly after 9/11 to rebrand products and services and secure a piece of the domestic security budget. James Dao, a writer for the *New York Times*, interviewed defense contractors in March of 2002 for an article on the internal security market that emerged after 9/11. According to Dao, on September 12th "Raytheon's chairman, Daniel P. Burnham, asked Mr. Wollen [Raytheon's vice president for integrated information systems] to lead a team to prepare for the new security demands, and (domestic) market possibilities, after the attacks of 9/11."[87] Between 2002 and 2003, Raytheon's government contract awards increased

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[83] Light, "Urban Security," 612.

[84] Brad Plumer, "America's Staggering Defense Budget, in Charts," *Washington Post*, January 7, 2013, https://www.washingtonpost.com/news/wonk/wp/2013/01/07/everything-chuck-hagel-needs-to-know-about-the-defense-budget-in-charts/.

[85] Silberberg, "Boston's Public Realm."

[86] "U.S. Homeland Security & Public Safety Market—2013–2020," Homeland Security Research, accessed September 7, 2017, http://homelandsecurityresearch.com/2012/09/u-s-homeland-security-public-safety-market-2013-2020/.

[87] James Dao, "Internal Security Is Attacking a Crowd of Arms Contractors," *New York Times*, March 20, 2002.

12 percent, from \$700,000,000 to \$790,000,000.[88] This data does not differentiate between contracts awarded for domestic homeland security and national defense spending, but it nevertheless illustrates a notable increase in federal contracts awarded to Raytheon and just how dependent defense contractors are on the continuation of America's war on terror.

C.   THE NEW CORNER OFFICE

Protecting the public from a terrorist attack is inarguably the right thing to do in today's world. Terrorists seek targets where there is a density of people at a location that is recognizable to a worldwide audience. By selecting a target that meets these criteria, terrorists hope to gain the maximum media coverage of the attack to impact the largest audience possible.[89] However, making decisions to add homeland security architecture based on a perceived sense of importance bears further scrutiny and skepticism.

After the terrorist attacks of 9/11, the highly competitive commercial property market soon discovered that "the need for a high level of security is akin to the corner office—it engenders an element of prestige."[90] Susan Silberberg conducted a case study of the impacts to 9/11 on Boston's public realm, during which she explored private interests like prestige that might be driving security agendas. Silberberg interviewed local officials, property managers, developers, and architects and found that "some public officials and business executives interviewed mentioned the existence of 'security envy'—the greater your importance, the more stringent is your organization's security concerns."[91] Thus, instead of being perceived as a burden, some security concerns "bring prestige, additional funding, and placement higher in the pecking order—an incentive to

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[88] "New Data Shows How Contractors Are Cashing in on War on Terror," Defense-Aerospace, February 23, 2003, http://www.defense-aerospace.com/articles-view/feature/5/34155/us-contractors-cashing-in-on-%E2%80%9Cwar-on-terror%E2%80%9D.html.

[89] Bruce Schneier, "Terrorist Targets of Choice," *Schneier on Security*, February 4, 2011, https://www.schneier.com/blog/archives/2011/02/terrorist_targe.html.

[90] Silberberg, "Boston's Public Realm."

[91] Ibid.

embrace security expenditures and visible security redesign."[92] This phenomenon is similar to the appeal of gated residential communities.

Similarly, an operations director of a new high-rise office development in Boston reported that potential tenants from New York City commented on the lack of visible security by stating, "Why is it such an open door here? The building looks vulnerable compared to what we see in NYC."[93] The building owner installed more restrictive and visible security measures to resemble homeland security architecture designed for a mega-city 200 miles away. These examples show that property owners must now consider the addition of enhanced security features as a means to gain a competitive edge. In many ways, the reassuring presence of the doorman from years' past has been reincarnated as homeland security architecture in the post-9/11 world.

Another area where a sense of prestige and economics plays a factor in homeland security architecture is the acknowledgement of a city's valuableness by being named on the national top ten list of potential terrorist targets. While there is not an official top ten list, the Department of Homeland Security (DHS) does classify cities and large urban areas into a two-tier system for the purpose of awarding funding, like through the Urban Area Security Initiative Grants (for which $47 billion in grant funding have been awarded since 2002).[94] The Tier 1 urban areas include the cities of New York; Chicago; Los Angeles; Washington, DC; San Francisco, Houston, Newark, Philadelphia, Boston, and Dallas. Tier 1 urban areas have received the majority of funding. There are fifty-four smaller urban areas that are classified as Tier 2. Population accounts for only 30 percent of a city's ranking for funding; the presence of a border and critical infrastructure are also considered.[95] While the Urban Area Security Initiative was created to "assist high-threat, high-density urban areas in efforts to build and sustain the capabilities necessary to

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[92] Silberberg, "Boston's Public Realm," 261.

[93] Ibid., 257.

[94] "DHS Announces Grant Allocations for Fiscal Year 2016 Preparedness Grants," DHS, June 29, 2016, www.dhs.gov/news/2016/06/29/dhs-announces-grant-allocations-fiscal-year-2016-preparedness-grants.

[95] Henry Grabar, "Washington Gives Billions in Anti-terror Funds to Cities. Orlando's Barely Gotten a Trickle," *Slate*, June 13, 2016, www.slate.com/blogs/moneybox/2016/06/13/orlando_doesn_t_get_any_money_from_the_department_of_homeland_security_here.html.

prevent, protect against, mitigate, respond to, and recover from acts of terrorism," there is a perception that grants acknowledge national importance.[96] For instance, in January of 2016 the mayors of Las Vegas, Nevada, and Henderson, New Mexico, met with then Homeland Security Secretary Jeh Johnson to discuss their concerns with the risk-based allocation model used by DHS to determine Initiative funding. The mayors stated in a letter to Secretary Johnson, "It is unfathomable to us that the internationally known and iconic destination of Las Vegas, NV would rank a mere 29 out of the top 100 most populous Metropolitan Statistical Areas in the nation."[97] The Mayors felt their status as a worldwide tourist destination should be more of a consideration in their grant applications. In other words, prestige should count for something in the awarding of security-related grant funding.

Ironically, the same prestige gained by visible homeland security architecture could bring a potential target to the attention of terrorists. According to Coaffee, "Conspicuous security may identify some organizations as targets by highlighting their presence (and perceived vulnerabilities) to would-be terrorists."[98] Well-designed homeland security architecture blends into urban environments; the U.S. District Courthouse in Seattle, Washington, is a good example. According to the General Services Administration (GSA), homeland security architecture was designed to provide site security "while maintaining the sense of transparency, openness and accessibility desirable in public buildings"; for instance, the public space pictured in Figures 8 and 9 "employs a number of barriers—including the tree grove, entry steps, sculpture garden, fountain, and strengthened light poles, benches, and handrails to interrupt unwanted

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[96] "Grant Details," Homeland Security Grants Info, accessed September 19, 2017, http://www.homelandsecuritygrants.info/GrantDetails.aspx?gid=17162.

[97] Jim Meyers, "Mayors Meet Homeland Security Secretary over Funding Concerns," *Las Vegas Review-Journal*, January 21, 2016; "Metropolitan and Micropolitan," United States Census Bureau, last revised September 8, 2016, https://www.census.gov/programs-surveys/metro-micro/about/glossary.html.

The United States Office of Management and Budget determines metropolitan statistical areas according to Census Bureau data. "Metropolitan statistical areas consist of the county or counties (or equivalent entities) associated with at least one urbanized area of at least 50,000 population, plus adjacent counties having a high degree of social and economic integration with the core as measured through commuting ties".

[98] Coaffee, O'Hare, and Hawkesworth, "Visibility of (In)Security."

vehicular access."[99] The intentional design of the courthouse does not call attention to its homeland security architecture, but adds a calm and welcoming oasis in a busy downtown core.

The tiered water pool is a homeland security architecture feature that is attractive and inviting.

Figure 8. Water Feature in front of the U.S. District Courthouse in Seattle, Washington[100]

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[99] "New Seattle Courthouse, Seattle, WA," GSA, accessed online June 28, 2017, www.gsa.gov/portal/ext/html.

[100] Source: GSA digital image, posted by "Ron Swick," 2006, www.gsa.gov/portal/ext/html/site/hb/ category/25431/actionParameter/exploreByBuilding/buildingId/1104#.

The addition of trees and sitting areas along with the water feature in front of the building make this a popular place on a sunny day.

Figure 9. Seattle District Courthouse with View of Trees[101]

The changes to public life and the urban landscape in America post-9/11 are significant. Some of these changes, like removing one's shoes to pass through airport security, while an annoyance, are an acceptable tradeoff for increased security. Other changes, like restricted access to public spaces, buildings, and monuments, are more detrimential to a democractic society and should only occur after careful consideration of possible unintended consequencies. Economics and the quest for prestige should not be factors in determining the aesthetics of or the need for homeland security architecture.

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[101] Source: "GSA digital image, posted by "Ron Swick," 2006, www.gsa.gov/portal/ext/html/site/hb/category/25431/actionParameter/exploreByBuilding/buildingId/1104#.

IV. AMERICAN PRIVATE-SECTOR DESIGN POLICIES AND GUIDES

The design and planning communities began vocalizing concern after 9/11 that the rapid push to alter the openness of public spaces was in direct conflict with contemporary city planning and American civic values. The American Planning Association (APA) stated, "Since 9/11, many security measures have been applied on an ad hoc basis, without regard for their impacts on development patterns and community character."[102] Urban planners in general would like to see all safety concerns addressed equally: urban crime, natural disasters, poverty, and homeland security. If aesthetics in U.S. homeland security architecture are deficient, it is not from a lack of design resources. This chapter reviews the treatment of aesthetics in U.S. design guides for homeland security architecture. It also introduces the associations of professionals who can influence homeland security architecture aesthetics.

As this chapter shows, the major private-sector American associations that represent planners and design professionals each published a guide on homeland security architecture following 9/11. Guides in general are advisory documents, while manuals are more compulsory. The associations are voluntary and do not have the regulatory authority to mandate aesthetics in homeland security architecture. However, the associations shape their respective academic disciplines, provide continuing education for members, and organize professional conferences at the local, state, and national levels. These organizations can influence public realm design and have individually advocated for the importance of aesthetics in homeland security architecture.

The associations are presented here in the order of the potential opportunities to implement aesthetics into homeland security architecture. The first association examined is the APA, which views homeland security architecture through a broader lens of neighborhood impacts and how security might be integrated into other city planning efforts. The chapter next examines the American Institute of Architecture (AIA), which

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[102] "APA Policy Guide on Security," APA, 2.

influences the aesthetics of homeland security architecture in the design of new buildings. Lastly, this chapter examines the American Society of Landscape Architects (ASLA), which focuses on site design for new buildings and retrofitting existing building sites.

In American cities, such as Chicago and Seattle, shown in Figures 10 and 11, growth is planned around designated urban villages that are aesthetic and emphasize the pedestrian experience. Buildings with upper-floor residential units contain ground-floor retail spaces that front wide, landscaped sidewalks (see Figure 10). These villages have a fluid flow from private to public spaces. Urban villages also create an increased sense of community, promote healthier lifestyles, and contribute to a higher quality of life (see Figure 11).[103] These attributes could also be described as important to homeland security.

Open public space flows into ground-floor businesses, with second-floor residences.

Figure 10. Urban Chicago Suburb with Public Open Space Design[104]

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[103] More information on urban villages can be found at liveablecities.org; see also Luis Zamorano and Erika Kulpa, "People-Oriented Cities: Mixed-Use Development Creates Social and Economic Benefits," July 23, 2014, http://www.wri.org/blog/2014/07/people-oriented-cities-mixed-use-development-creates-social-and-economic-benefits.

[104] Source: "Mixed-Use Development in Geneva," digital image, uploaded by "Chris Phan," Flickr,. July 14, 2009, www.flickr.com/photos/functoruser/3719940097/.

This aesthetical urban village combines single-family homes, duplexes, and apartments around community gardens and parks a short distance from downtown. The neighborhood design encourages a resilient and healthy community.

Figure 11. High Point Neighborhood in Seattle, Washington[105]

A.   THE AMERICAN PLANNING ASSOCIATION

The APA has a long legacy of shaping American urban planning policies. The mission of the APA is to advocate for the creation of beautiful and functional cities. In its modern form, the APA dates back to the first National Conference on City Planning in Washington, DC, in 1909. APA members have "long been involved in the decisions that affect land use relationships along with decisions that affect the design and operation of civic space, utility networks, transportation systems, and other public facilities."[106] Homeland security architecture is a new phenomenon that planners must consider. APA members need to anticipate the requirements for homeland security architecture and respond proactively in their planning efforts.

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[105] Source: "High Point Community Gardens," digital image, uploaded by "Brett VA," Flickr, January 30, 2010, https://www.flickr.com/photos/smart_growth/4574413203/.

[106] "APA Policy Guide on Security," APA.

The APA's national chapter produced the "APA Policy Guide on Security" in 2005 to educate and inform members about federal laws, regulations, and guidelines on security design. The policy guide contains two major principles: homeland security architecture should preserve "the integrity of our buildings, public spaces, and communities, while demonstrating the values of an open and accessible society"; and planning for security should be comprehensive and include planning for crime prevention, natural disasters, school shootings, and terrorist attacks.[107] An overarching intent of the policy guide, as stated in its introduction, is to "help define the role of planners in security matters, and to ensure that planners are able to influence and participate in government policies and legislative decisions that involve security."[108] Planners look beyond a specific site to a neighborhood, and beyond still to the city. As the policy guide states, changing a site either for the better or for worse can have a ripple effect on a community:

> APA encourages planning that will contribute to the public welfare by developing communities and environments that more effectively meet the present and future needs of people and society. Security is more likely to be threatened in communities, and among persons, where these fundamental needs are not being met.[109]

Despite this, the APA has not successfully disseminated its message to affiliate chapters. Nor does the national APA policy seem to have had a wide impact on the academic field of urban planning. For example, in an informal conversation with the author, Professor Daniel Abramson of the Urban Design and Planning Department at the University of Washington stated that he was not specifically aware of the APA's policies on homeland security architecture. When asked if homeland security architecture is part of the university's curriculum for planners, Abramson indicated it is not. It is unclear if the APA can claim success in advocating the policies stated in its national chapter's security guide.

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[107] "APA Policy Guide on Security," APA, 2.

[108] Ibid., 3.

[109] Ibid.

B.   THE AMERICAN INSTITUTE OF ARCHITECTS

Like the APA, the AIA is an advisory association for the nation's architects. Based in Washington, DC, the AIA has been the "leading professional membership association for licensed architects, emerging professionals, and allied partners since 1857."[110] After 9/11, the federal government invited the AIA to provide subject-matter expertise for the creation of the GSA's *Site and Security Design Guide* for federal entities. The AIA went on in 2009 to publish a report on embassy security for the State Department, titled *Design for Diplomacy: New Embassies for the 21st Century*.[111] This report, created by a multidisciplinary team of experts convened by the AIA, particularly influenced the design of the new American Embassy in London. According to the architect who designed the new embassy, it meets "all the required security standards while honoring the English tradition of urban parks," and is designed to represent "our democracy and our relationship with the United Kingdom."[112] Visitors to the embassy can stroll through a tranquil, park-like setting with shady trees and flowing water, and otherwise partake in a public open space designed with a balance of aesthetics and homeland security architecture (see Figure 12).

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[110] "About AIA," accessed September 7, 2017, http://www.aia.org/about/index.htm.

[111] AIA 21st-Centruy Embassy Task Force, *Design for Diplomacy: New Embassies for the 21st Century* (New York: American Institute of Architects, 2009).

[112] Kieran Timberlake, "Winning Design Concept," U.S. Embassy & Consulates in the United Kingdom, accessed September 7, 2017, https://uk.usembassy.gov/new-embassy-design-concept/.

The moat and grassy slope are homeland security architecture achieved through landscape design.

Figure 12. Design for New United States Embassy in London[113]

Perhaps because of its collaborative work with the GSA and the State Department, the AIA produced the most comprehensive guide on aesthetics and homeland security architecture. The AIA published a book in 2003 entitled *Security Planning and Design: A Guide for Architects and Building Design Professionals*.[114] This book provides architects and other design professionals with the guidance for designing homeland security architecture for both new and existing facilities. As a more comprehensive guide, this book has sections on conducting an assessment of a client's security needs and working with security professionals.

In conclusion, it seems the AIA has been more successful then the APA with homeland security architecture aestheics due to the nature of the association's work and

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[113] Source: "View from the Embassy Park," digital image, photo by Kieran Timberlake, U.S. Embassy & Consulates in the United Kingdom, accessed July 9, 2017, https://uk.usembassy.gov/our-relationship/new-embassy/photos1.

[114] AIA, *Security Planning and Design: A Guide for Architects and Building Design Professionals* (Hoboken, NJ: Wiley, 2003).

its involvement with the federal agencies mentioned. However, like the University of Washington's curriculm for planners, the school's curriculm for the Department of Architecture does not include coursework on homeland security architecture. There is an important missed opportunity to educate new architects on how to work with their clients' homeland security needs.

C.   THE AMERICAN SOCIETY OF LANDSCAPE ARCHITECTS

The final association discussion turns to the ASLA. It is the smallest of the associations discussed herein, with 15,000 members.[115] Of the associations, the ASLA organized and responded to 9/11 the most rapidly. Barely a month after the attack, the ASLA assembled a design coalition to promote the best security designs for protecting people and public places. In 2003, the coalition published a security design policy for ASLA members. The policy states:

> The proliferation of makeshift security measures has a detrimental effect on the visual aesthetics of many public, government, and institutional properties. The American Society of Landscape Architects encourages initiating directives and funding at the Federal, State, and local levels to replace existing makeshift devises with well-designed landscape elements in comprehensive ways … design recommendations should be developed by teams of interdisciplinary experts lead by experienced Landscape Architects.[116]

After publishing its association policy statement, the ASLA hosted a 2004 symposium called "Safe Spaces: Designing for Security and Civic Values." Topics included "design, historic preservation, and post-9/11 liability exposure," "security and urban design," and "threats to public spaces and policy tools for determining appropriate responses."[117] The ASLA brought together a broad group of professionals that included security experts in counter-terrorism design, the GSA, engineers, and the executive director of the NCPC to start an interdisciplinary conversation on aesthetics and

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[115] "About ASLA," accessed September 16, 2017, https://www.asla.org/aboutasla.aspx.

[116] "Security Design," ASLA, 2003, accessed September 16, 2017, www.asla.org/ uploadedFiles/CMS/Advocate/Public_Policies/Public/Security_Design.pdf.

[117] ASLA, *ASLA Security Design Symposium Abstracts July 2004* (Washington, DC: ASLA, 2004), www.asla.org/uploadedFiles/CMS/Resources/securitydesignabstractfinal.pdf.

homeland security architecture. The symposium also offered attendees continuing education tracks on threat assessments and risk analysis, and on how to work with government security standards.

Because the ASLA took an early and active lead in security design, it appears to be the most successful of the three associations in blending aesthetics and homeland security architecture. One of its most notable landscape architecture projects was the redesign of the Washington Monument's grounds. Prior to the redesign project, the concrete jersey barriers used as a security feature marred the beauty of the monument (see Figure 13). The grounds of the monument were re-contoured and new landscaping, lighting, and low granite seat-walls were installed around the site. The new walls create a welcoming spot for visitors to sit and view the sweeping landscape, while also acting as a barrier to vehicle-bourne explosive devices (see Figure 14).

The concrete jersey barriers were used to create an ad-hoc security perimeter.

Figure 13. Washington Monument before Landscape Architecture Redesign[118]

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[118] Source: "Rapid Response," digital image, American Society of Landscape Architects, November 30, 2001, https://asla.org/NewsReleaseDetails.aspx?id=8472.

Granite "ha ha" walls, traditional low walls used to contain grazing animals, can stop hostile vehicles while also providing public seating. Like with the new embassy in London, grass-covered slopes partially achieve site security.

Figure 14. Washington Monument after Landscape Architecture Redesign[119]

The ASLA gave a design honor award to Olin Partnership, the firm responsible for the new homeland security architecture around the monument; the awards jury stated that the monument's redesign is

> bold and clear; a minimalist solution that turned a project originally funded to prevent terrorism into a handsome civic amenity. It is proof that the union of sound security and artful design is not only possible, but can be functional and graceful.[120]

The *Washington Post* agreed with the ASLA jury, calling Olin's design "one of the extraordinarily rare examples of aesthetically pleasing anti-terrorism designs in the

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[119] Source: "Washington Monument New Security, 2005," digital image, National Capital Planning Commission, accessed July 12, 2017, https://www.ncpc.gov/Images/Album_AmericasFrontYard/AFY/pages/AFY_NewSecurityWashMon_jpg.htm.

[120] "General Design Honor Award," ASLA, accessed September 7, 2017, /www.asla.org/awards/2008/08winners/236.html.

United States."[121] In another *Washington Post* article, Thomas Luebke, secretary of the U.S. Commission of Fine Arts, also praised the design:

> Part of the issue in these security measures is a philosophical debate. This is supposed to be a free and open society. Do we want these precious monuments to look embattled? The Washington Monument doesn't, and it's a tribute to the design of the project.[122]

Successes like the redesign of the Washington Monument's grounds illustrate what is possible when aesthetics are thoughtfully considered in the design of homeland security architecture. The ASLA's quick response to 9/11, including hosting an interdisciplinary symposium on security, appears to have provided landscape architects with the tools they needed to design homeland security architecture that creates open and attractive public spaces.

D.   CONCLUSION

In the years after 9/11, the APA, the AIA, and the ASLA attempted to create a national framework for homeland security architecture that softened—through good aesthetics—the hardening of public places. It is now a decade after the first private-sector design guides and policies were published. However, professional design associations' efforts to influence the aesthetics of homeland security architecture have shown limited results. In a conversation with the author regarding an application for certification under the SAFETY Act, Seattle Seahawks Security Manager Michael Morrow indicated he was initially unaware that there were better aesthetic choices to meet homeland security needs around Century Link Field than bollards and concrete planters.[123] Given that the SAFETY Act is a DHS program, there remain obvious opportunities for improvement by providing better information on how aesthetics can be incorporated into homeland security architecture.

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[121] Philip Kennicott, "A Truly Monumental Security Issues," *Washington Post,* November 8, 2010.

[122] Petula Dvorak, "Washington Monument Subtly Fortified," *Washington Post*, July 1, 2005.

[123] The SAFETY Act (Support Anti-terrorism by Fostering Effective Technologies) is a voluntary program administered by DHS to encourage the private sector to use anti-terrorism technologies at their facilities. DHS accepts some liability protection for applicants who are successfully accepted into the program.

The design guidance documents produced by the national chapters of the APA, AIA, and ASLA have not been widely adopted on the state and local level. The work of these associations are still recommendations, and they have not been codified in building or municipal codes, at least in the state of Washington. These associations could combine, creating a louder voice through which to advocate for homeland security architecture aesthetics and perhaps create great success. Until the aesthetics of homeland security architecture are considered in equal measure to the architecture's ability to lessen terrorist attacks' effects, this will not change. Until public agencies hold homeland security architecture projects to the same public benefit requirements as other projects, the hostile design of the urban environment will continue.

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V. PUBLIC-SECTOR HOMELAND SECURITY ARCHITECTURE IN THE UNITED STATES AND THE UNITED KINGDOM

The need for homeland security architecture is still a relatively new phenomenon in the United States. Consequently, a cohesive approach to homeland security architecture in the United States has yet to occur. There are numerous homeland security architecture design guides from the private sector, as illustrated in the previous chapter, and by the federal government, examined in this chapter. The effectiveness of the guides as measured by their widespread use is questionable. Homeland security architecture that uses aesthetics to enhance public spaces is the desired outcome of this thesis. To achieve this outcome, it is important to examine the history and current status of homeland security architecture in the United States and to consider the United Kingdom's example for opportunities to improve.

A. HOMELAND SECURITY ARCHITECTURE IN THE UNITED STATES

> Site security is not just an obligation, but an opportunity.
>
> —*The Site Security Design Guide*, GSA[124]

In the United States, Washington, DC, became the genesis for both the private and public-sector design guides after 9/11. The District of Columbia is home to many federal agencies, the White House, national monuments, and dozens of museums. Outside of New York City, the capital arguably experienced the most rapid change to its streetscape to protect all its potential terrorist targets after 9/11. Several federal agencies created homeland security architecture design guides like those produced by the private-sector associations mentioned in the previous chapter. The design guides, authored by the National Capitol Planning Commission (NCPC), GSA, and FEMA, form the backbone of public-sector homeland security architecture in America.

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[124] GSA, *Site Security Design Guide*, 7.

1. The National Capital Planning Commission

The NCPC is the federal planning agency responsible for ensuring projects in Washington, DC, are compliant with the National Historic Preservation Act and the National Environmental Policy Act. The NCPC agency mission can be traced back to the French architect Pierre L'Enfant, who designed the capital after the Revolutionary War. L'Enfant desired to create Washington, DC, as a "magnificent city, worthy of the nation, free of its colonial origins, and bold in its assertion of a new identity."[125] Given these regulatory obligations and the Commission's historic roots, the NCPC was concerned after 9/11 with the prevalence of "unsightly and makeshift security barriers that are negatively impacting the historic beauty of Washington, DC" (see Figures 15 and 16). The NCPC assumed the task of preparing a comprehensive security design plan to address safety concerns in the capital while retaining the beauty of its streetscapes. In addition to being concerned with the aesthetics of temporary security measures, the NCPC felt the homeland security architecture erected after 9/11 could be contrary to the spirit of the nation's capital, a free and open society whose "public realm must express those values."[126] As an urban planning agency with federal authority, the NCPC had a unique role to play in influencing and promoting the aesthetics of homeland security architecture.

Continuing the legacy of L'Enfant, the NCPC assembled an interagency security task force, which included security professionals from federal agencies responsible for homeland security and NCPC members.[127] The task force, seeking to "guide the design of contextually sensitive physical security features in the monumental core of the city," created the *National Capital Urban Design and Security Plan* by October of 2002.[128]

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[125] "History," National Capital Design Commission, accessed September 8, 2017, www.ncpc.gov/ ncpc/Main(T2)/About_Us(tr2)/About_Us(tr3)/History.html.

[126] NCPC, *National Capital Urban Design and Security Plan*, iii.

[127] The NCPC has twelve members: three are presidential appointees, two are pointed by the mayor of DC (also a commissioner), and other members represent the executive branch agencies with significant land holdings in the region and leaders of the U.S. House and Senate committees with DC oversight responsibility.

[128] "Security," NCPC, accessed September 16, 2017, www.ncpc.gov/ncpc/Main(T2)/Planning(Tr2)/ PlanningStudies(Tr3)/Security.html.

This first guide provided recommendations for meeting homeland security architecture requirements at specific locations, such as on Pennsylvania Avenue from the White House to the Capitol Building. The guide's recommendations intended to help project applicants meet the regulatory requirements enforced by the NCPC while meeting the new security needs post-9/11. By convening a task force of subject-matter experts representing security, urban design, architecture, historic preservation, and fine arts fields, the guide provided a balanced approach between aesthetics and security for the public sector.

Figure 15. Representation of Temporary Security Barriers at the Historic Carnegie Library in Washington, DC, 2010[129]

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[129] Source: "Washington Nuclear Security Summit," Flickr digital image, uploaded by "David Clow," April 12, 2010, https://www.flickr.com/photos/davidclow/4515928337/in/photolist-o1Wt8n-4qKaTn-edLav9-5wUrvK-BqczwC-7T4jap-7T7yNs-7T4iGF.

Figure 16. Homeland Security Architecture, Including "Temporary" Concrete
Jersey Barriers, in front of the White House in December 2010[130]

2.   The General Services Administration

The GSA is another federal agency that has the ability to influence the aesthetics of homeland security architecture. The GSA is responsible for 1,523 federally owned facilities in addition to dozens of leased facilities (half of the 1.2 million federal employees work in leased space, as mentioned in Chapter I).[131] The GSA began evaluating the safety of federal facilities after the 1993 Oklahoma City bombings. The terrorist attacks of 9/11 hastened the security surveys of federal facilities, though it took until 2007 for the GSA to publish its *Site Security Design Guide*. The intended audience of the GSA's guide is "the designers, security experts, customers, and other decision-makers who are entrusted with developing security countermeasures at new and existing

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[130] Source: Source: "White House," Flickr digital image, uploaded by "Kačka a Ondra," December 15, 2010, https://www.flickr.com/photos/14548166@N03/6524904725.

[131] "Facilities Operations," GSA, last reviewed June 22, 2017, https://www.gsa.gov/portal/category/26972.

GSA facilities."[132] The GSA design guide also communicates the need to "apply balanced approaches to every aspect of security … both the security of the federal buildings and the quality of the public realm, at the levels of the street and the entire city."[133] The GSA guide addresses the responsibility the government has in considering the role of aesthetics and urban planning in the design of homeland security architecture.

3.   The Federal Emergency Management Agency

FEMA expanded on the GSA's guide and also produced its *Site and Urban Design for Security: Guidance against Potential Terrorist Attacks* in 2007. FEMA's design guide is the first to be produced by the public sector specifically for the private sector. The introduction to FEMA's guide states its intended audience to include:

> the design community of architects, landscape architects, engineers and other consultants working for private institutions, building owners and managers and state and local government officials concerned with site planning and design.[134]

Chapters of the FEMA guide address the challenges of designing homeland security architecture in a dense central business district and designing multi-functional security installations that enhance the streetscape for users of public spaces. FEMA encourages thinking of homeland security architecture as an opportunity to beautify a public space, not just to serve as a security enhancement. The guide includes several examples of well-defended sites that also provide attractive public spaces in central business districts.[135] For example, the San Francisco Federal Building is fronted by a public space where sculptured forms, attractive landscaping, and reinforced streetscape elements were used as homeland security architecture (see Figure 17). Another example is the Minneapolis Federal Courthouse Plaza. The plaza was designed with planted berms reminiscent of the Minnesota countryside and capable of stopping a vehicle-borne

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[132] GSA, *Site Security Design Guide*, 7.

[133] Ibid.

[134] FEMA. *Site and Urban Design for Security*, i.

[135] Ibid.

terrorist attack. Benches and large logs encourage the public to linger and enjoy the open space (see Figure 18).

The pedestrian plaza serves the dual purpose of homeland security and architecture.

Figure 17. San Francisco Federal Building[136]

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[136] Source: FEMA. *Site and Urban Design for Security*, 6-18.

The plaza has planted berms, large logs that double as public seating, and an overall urban park–like feel.

Figure 18. Minneapolis Federal Courthouse Plaza[137]

In conclusion, the public-sector guides, much like the private-sector guides, have not reached a broader audience of state and local agencies, or even other federal agencies entrusted with managing the public realm. For example, transportation agencies manage much of the public realm in the form of public rights of way. Government manuals produced for transportation agencies concerning managing the right of way provide no guidance on homeland secuirty architecture for state and local transportation agencies.[138] In fact, there is no mention of homeland secuiry archticture at all. Not only is this a missed opportunity to promoste aesthetics, it is a deservice to transporation agenceis responpsile for creating many public spaces across the country.

The problem is not a lack of design guidance resources for aesthetical homeland security architecture, which improves the public realm and supports democratic values. A broad awareness of these design guidance resources is the problem. Further, there are

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[137] Source: FEMA. *Site and Urban Design for Security*, 6-21.

[138] Manuals have been produced by the National Association of City Transportation Officials and the U.S. Department of Transportation.

59

excellent design examples—such as the U.S. District Courthouse in Seattle (see Figures 8 and 9 in Chapter III, Section B), the new U.S. Embassy in London (Figure 12, Chapter IV, Section B), and the Washington Monument (Figure 14, Chapter IV, Section C)—pointing the way for a balance between aesthetics and security. Instead, the United States is missing key elements that would promote the importance of aesthetics in homeland security architecture. These elements include the integration of academics between the fields of security studies and disciplines concerned with aesthetics, like architecture; the failure of homeland security architecture design guides to reach a broad audience; and the lack of regulations that would mandate consideration of aesthetics on the state and local level, such as requirements for historical preservation or mitigating environmental impacts to the public realm.

B. AESTHETICS AND HOMELAND SECURITY ARCHITECTURE IN THE UNITED KINGDOM

> For the United Kingdom, however, the battle for "hearts and minds" has from the outset been as important, if not more so, as the hard power elements of the campaign against terror.
>
> —Prime Minister Tony Blair[139]

Unlike the United States, the United Kingdom has experienced terrorist bombings on a regular basis since the late 1960s. Thus, for Britain, the advent of Islamist violence since 9/11 represents more continuity than a jarring new reality. The deadliest terrorist event in the United Kingdom in recent years occurred on July 7, 2005. The 7/7 Central London terrorist bombings comprised four separate attacks carried out by Islamist radicals in the London underground railway and on a London city bus. The attacks killed 52 people and injured 950.[140] The British government responded to the attacks with the Terrorism Act of 2006. While elements of the Terrorism Act controversially broadened terrorism stop-and-search powers and extended the time a terror suspect can be detained without a charge (from fourteen days to twenty-eight), there was not a significant change

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[139] Tony Blair, "A Battle for Global Values," *Foreign Affairs*, January/February 2007.

[140] Ian Cobain, "London Bombings: The Day the Anti-terrorism Rules Changed," *Guardian*, July 7, 2010, https://www.theguardian.com/uk/2010/jul/07/london-bombings-anti-terrorism,

to homeland security architecture design for the public realm; a pedestrian carried out the bombing attacks using public transportation.[141]

       While Tony Blair's quote on the previous page refers to countering terrorist groups, it could just as easily describe the United Kingdom's approach to homeland security architecture today. From an urban design perspective, the United Kingdom moved beyond the reactionary fortifications of urban spaces used in northern Ireland, particularly in Belfast, during the 1970s with the Good Friday Peace Accord of 1998. At that time, the British government, in response to a series of IRA bombings in the city center, enforced severe counter-terrorism measures in the heart of Belfast that became known as the Ring of Steel. According to Irish journalist David McKittrick, "All major roads are covered. Some minor roads have been sealed off which means vehicles have no option but to take their place in the queues to be checked."[142] Further, pedestrians wishing to access the city center also had to pass through security checkpoints. Yet perhaps the greater impacts of the Ring of Steel on the community can be found in the fortified watchtowers (see Figure 19) and the concrete and metal walls constructed to prevent access between Catholic and Protestant neighborhoods (see Figure 20).

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[141] "Q&A: Terrorism Laws," BBC News, July 3, 2006, http://news.bbc.co.uk/1/hi/uk_politics/4715478.stm.

[142] David McKittrick, "Belfast Security Measures Accepted as Normal: People in Belfast Have Become Accustomed to Police Checks and the 'Ring of Steel' which Protects the City's Commercial Heart," *Independent*, December 1992.

Figure 19. Heavily Fortified British Watchtower Contrasting with Crossmaglen Neighborhood Buildings[143]

Known as peace walls, these security barricades separate Catholic and Protestant neighborhoods in northern Ireland in 2013.

Figure 20. Northern Ireland Peace Walls[144]

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[143] Source: Jonathan Olley, "In Pictures: Northern Ireland Then and Now," BBC News, October 2016.

[144] Source: "Peace Wall, Belfast," digital image, uploaded by "Nick," Flickr, May 12, 2013, www.flickr.com/photos/34517490@N00/9098740011..

Belfast's experiences show how architecture can divide countries physically and psychologically. However, architecture can also promote reconciliation and tear down walls, both figuratively and literally. The new Titanic museum in Belfast is an example of architecture's positive power.

The Titanic Belfast opened in 2012 at the historic Harland and Wolff shipyards site of the HM *Titanic* luxury liner (circa 1909 to 1912). Paul Crowe, managing director of the architectural firm that designed the museum, recognized that the project's implications stretched far beyond building a new museum; it had the ability to change the world's perception of northern Ireland and help heal the city's sectarian divide. Crowe describes the importance of the project for place branding and marketing:

> This is a landmark development for Northern Ireland which we believe will demonstrate the ability of iconic architecture to shape internal and external perceptions. Belfast has come far in the past 15 years and a statement building such as Titanic Belfast reflects and reinforces the city's renewed sense of civic pride and cohesion.[145]

The public plaza around the musuem showcases homeland security archtiecture designed with aesthetics in mind. The plaza stairs serve as a vehicle barrier leading up to a large piece of steel artwork spelling out "Titanic"; the Titanic art piece features a reinforced foundation that functions as a secondary homeland security barrier (see Figure 21). Further, the plaza includes granite blocks with wood decking that provide public seating and serve a dual purpose as homeland security architecture (see Figure 22). The Titanic museum demonstrates how the historic lessons learned from countering sectarian violence in Belfast helped shape the United Kingdom's contemporary aesthetic approach to homeland security architecture.

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[145] "Titanic Belfast / CivicArts & Todd Architects", *Arch Daily*, April 7, 2012, www.archdaily.com/ 223483/titanic-belfast-civic-arts-todd-architects.

The museum grounds include a series of wide stairs leading to a plaza with a large art piece spelling "Titanic." The steps and artwork are designed to prevent a vehicle-borne terrorist attack.

Figure 21. Homeland Security Architecture at the Titanic Museum in Belfast[146]

The plaza is designed with granite block homeland security architecture featuring wood seating reminiscent of ship decking.

Figure 22. Titanic Museum Plaza[147]

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[146] Source: Hazel Thompson, "Following Game of Thornes to Belfast and Beyond," *New York Times*, July 15, 2013.

[147] Source: Kristy Hammond, "Townscape Supplies Anti-terrorist Protection to Belfast," *Architecture, Design & Innovation*, May 28, 2012, https://kirhammond.wordpress.com/2012/05/28/townscape-supplies-anti-terrorist-protection-to-belfast/.

This approach includes providing free programs, like government-sponsored design consultation for homeland security architecture and the patterning of public and private entities. One example of this collaboration is a national registry for architects and engineers who are certified in homeland security architecture and trained to value aestheticism in security design. The registry is sponsored by the national government but administered by a private association.

1.   Private-Sector Collaboration

There seems to be greater coordination between the private and public sectors in the United Kingdom. While there are other professional associations and government agencies partnering on homeland security, this thesis focuses on the organizations concerned with public realm design: the Royal Institute of British Architects (RIBA) and the Institute of Civil Engineers (ICE).

a.   The Royal Institute of British Architects

The RIBA is the equivalent of the American Institute of Architects. Founded in 1834, the RIBA promotes the field of architecture and establishes architectural design standards. In addition, the RIBA provides continuing education for its members on industry best practices in urban design, and advises schools of architecture in the United Kingdom on curriculum. Moreover, the RIBA actively promotes good aesthetics in homeland security architecture. As part of the RIBA's continued collaboration with the United Kingdom's National Counter-terrorism Security Office (discussed in the next section), the RIBA created *The RIBA Guidance on Designing for Counter-terrorism,* with the intent of being "an essential brief for architects, planners and engineers. It details the key agencies, the nature of the threat and possible design solutions for counter-terrorism measures."[148] Ruth Reed, president of the organization, states in the guide's foreward:

> If design retreats to a bunker mentality and colludes in the restriction or
> exclusion of the general public from many public buildings, or the creation
> of a sense of unease in crowded places, there will be a greater sense of

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[148] Royal Institute of British Architects (RIBA), *RIBA Guidance on Designing for Counter-terrorism* (London: RIBA, 2010).

alienation from all corners of society, including the disaffected and radicalised.[149]

Much like her American counterparts in the AIA, Reed stressed the importance that "our built environment continues to reflect the fact that we're an open and inclusive society."[150] Educating architects about homeland security architecture is one way to ensure open and welcome public spaces. The RIBA guide provides examples of projects that combine aesthetics and homeland security architecture.

The first example features the National Assembly for Wales. In addition to housing the Assembly, the building is open to the public and hosts exhibitions and performances. Accordingly, the security requirements for the project were significant due to the assembly's public access. The winning design used a large public plaza to create a natural barricade against vehicle-borne explosives. The plaza incorporated a series of staircases, landscaping, and strengthened street furniture to create an attractive and inviting public space by blending the homeland security architecture with good urban design. The project's success is due, in part, to early collaboration between security professionals and the design team. The project showcases the seamless integration of homeland security architecture into the building's design while supporting the civic nature of the assembly (see Figure 23).

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[149] RIBA, *RIBA Guidance*, 2.

[150] Ibid.

The building has a large public plaza that doubles as homeland security architecture, and walls of windows in the building's reception area suggest transparent governance.

Figure 23. National Assembly for Wales[151]

The second example is the Corporation of London headquarters. The offices for the Corporation are situated at the intersection of several high-volume streets. As a global corporation, the headquarters received a threat evaluation by a counter-terrorism security advisor (see Section 2a) and was determined a possible target for terrorists. Temporary bollards and barriers initially fortified the site. However, the site was in an area where the local government wanted to improve the pedestrian environment. The company and local authorities agreed on improvements in the public realm that included converting some streets to pedestrian boulevards with no vehicle access, the addition of new landscaping, and strengthened street furniture to mitigate hostile vehicle attacks. The project was funded with private dollars, but the public benefited as well; located in an economically

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[151] Source: RIBA, *Designing for Counter-terrorism*, 12.

depressed area, the improved grounds offer new pedestrian-only boulevards supporting sidewalk cafes, restaurants, and bars (see Figure 24).[152]

Figure 24. Improved Corporation of London Streetscape[153]

Both examples illustrate the potential public benefits of thoughtful homeland security architecture design. Engineers and architects worked with stakeholders and government security experts on threat assessments that were reasonble for each project and then, with a collaborative approach, integrated preventative measures into the streetscape in an unobtrusive manner while enhancing the public realm.

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[152] RIBA, *Designing for Counter-terrorism*, 12.

[153] Source: RIBA, *Designing for Counter-terrorism*, 16.

b.   The Institution of Civil Engineers

ICE is another UK professional association that plays an important role in homeland security architecture. While ICE has not produced a design guide on homeland security architecture, the Institution does advocate for "working with other professionals to ensure informed, proportionate, and holistic judgement" applied to homeland security architecture design.[154] ICE's most important contribution to homeland security architecture is its registry of security professionals.

Together with the Centre for Protection of the National Infrastructure, ICE maintains the Register of Security Engineers and Specialists (RSES). Engineers listed on the RSES demonstrate to clients "a specialist level of skill knowledge, proven security-related experience," and have committed to ongoing professional development by keeping up with new innovations and industry best practices.[155] These security experts are then able to provide a range of services, from advice on initial risk assessments to potential homeland security architecture design considerations and solutions. Prospective clients can search the register for companies whose employees are RSES members and use this information to help select the right design consultant. The register is a good example of public and private partnering.

2.   UK Government Homeland Security Architecture Initiatives

The two agencies discussed in this section, the National Counter Terrorism Security Office (NaCTSO) and the Centre for the Protection of National Infrastructure (CPNI), are co-located and consult with each other on public realm homeland security architecture projects. Additionally, these agencies partner with the private-sector agencies mentioned in the previous section on public realm design.

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[154] "Guidance on Security," Institution of Civil Engineers, accessed August 1, 2017, www.engc.org.uk/security.

[155] "Specialist Professional Registers," Institution of Civil Engineers, accessed August 1, 2017, https://www.ice.org.uk/careers-and-training/careers-advice-for-civil-engineers/specialist-professional-registers#Security.

a.   The National Counter Terrorism Security Office

NaCTSO is a police unit created to support the United Kingdom's counter-terrorism strategy.[156] NaCTSO is also the government entity responsible for many of the United Kingdom's innovative homeland security architecture programs. For example, the previous section mentioned how NaCTSO partnered with the RIBA on the *RIBA Guidance on Designing for Counter-terrorism* report. While NaCTSO is a national agency, it is also a police unit, which means the agency has the ability to influence policy down to the local level, through local constabularies. NaCTSO is unique among all the public agencies and private associations discussed in this thesis in its ability to influence homeland security architecture at the most local level.

Another example of NaCTSO's ability to innovate is through the architectural liaison officer (ALO) and counter-terrorism security advisor (CTSA) programs. Each police borough in the United Kingdom has an assigned ALO to provide free advice on "crime prevention through the built environment to planners, developers, builders, landlords and facility managers."[157] The ALO makes a referral to a CTSA if a need for homeland security architecture is determined. CTSAs comprise the nationwide network of specialist police advisers supported and trained by NaCTSO. A CTSA's core responsibility "is to identify and assess local critical sites within their jurisdiction that might be vulnerable to terrorist attack. Once a vulnerability is determined, the CTSA devises and develops protective security plans to minimize impact on a facility and the surrounding community."[158] These free services help champion the aesthetics of homeland security architecture on the local level that is not seen in the United States.

b.   Centre for the Protection of National Infrastructure

The design of the public realm must consider the application of HVM [homeland security architecture] measures holisitcally, to ensure that the

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[156] It is interesting to note that the United States the National Counterterrorism Center is an intelligence-gathering and -sharing organization.

[157] RIBA, *Designing for Counter-terrorism.*

[158] Ibid., 7.

correct level of protection is provided without compromising the ability to create aesthetic and functional public spaces.

—Centre for the Protection of National Infrastructure[159]

CPNI is the UK's technical authority for homeland security architecture. CPNI is an interagency organization representing industry, academia, British intelligence, and the critical infrastructure sectors.[160] CPNI's primary mission is "to provide integrated security advice (spanning physical, personnel and cyber information) to the businesses and organisations that make up the UK national infrastructure."[161] Further, CPNI provides advice and guidance to "other nationally important assets or events, including high-profile iconic targets, where impact of damage would be equally serious even though these do not deliver an essential service."[162] CPNI also sponsors academic and private-sector research and supports the work of research institutes in developing countermeasures for emerging threats.

In addition, the CPNI produced an attractive homeland security architecture guide. The title of the guide is *Integrated Security: A Public Real Design Guide for Hostile Vehicle Mitigation*.[163] This guide stands out from the other guides by including a range of design possibilities in the reference section. The CPNI guide proposes using reinforced public art, play equipment, and water features as homeland security architecture (see Figures 25, 26, and 27). The guide visually suggests designers and security professionals rethink the concept or definition of a physical barrier. All the public space amenities shown in Figures 25, 26, and 27 create barriers. The leap for these aesthetic barriers is limited only by how they are configured (intervals and space) and installed (the size and strength of a foundation).

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[159] CPNI, *Integrated Security*, 1.

[160] Home Office, CPNI, and NaCTSO, *Protecting Crowded Places: Design and Technical Issues* (London: Home Office, 2014), 46, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/302016/DesignTechnicalIssues2014.pdf.

[161] CPNI, *Integrated Security*, foreward.

[162] "About CPNI," accessed August 1, 2017, https://www.cpni.gov.uk/about-cpni.

[163] CPNI, *Integrated Security*.

Figure 25. Art Installations as Potential Homeland Security Architecture[164]

Figure 26. Urban Play Areas as Potential Homeland Security Architecture[165]

The options for homeland security architecture presented by CPNI offer perhaps the greatest possibility for enhancement to the public realm. Fortunately, most public spaces will never experience a terrorist attack. Thus, homeland security architecture that contributes to the aesthetics of the public realm and enhances a space for everyday use becomes a greater investment in the space than a design that servers no other function beyond security. Public agencies like NaCTSO and CPNI, by partnering with private agencies, help ensure public spaces in the United Kingdom get the maximum benefit from homeland security architecture.

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[165] Source: CPNI, *Integrated Security*, 39.

The United States could look to adopt or adapt some of the programs and initiatives the United Kingdom has developed over decades of employing homeland security architecture. Part of the United Kingdom's approach includes providing free programs, like government-sponsored design consultation for homeland security architecture, and facilitating training exercises on how to respond to a terrorist attack for the private sector. By comparing the homeland security architecture from Belfast in Figures 19 and 20 to the homeland security architecture featured in Figures 21 and 22 (see Chapter V, Section B), the evolution of the United Kingdom's homeland security architecture since the 1970s is apparent. Ultimately, the public deserves spaces that are safe, inviting, and attractive. The United States could use the United Kingdom as an ultimate design reference guide for successfully incorporating aesthetics into homeland security architecture in a cohesive manner, rather than agency by agency or association by association.

VI. CONCLUSIONS

> Future generations will judge our stewardship of this sacred ground. If we allow the deterioration of the city's historic civic spaces we will have failed in our obligation to the American people and to the visionary leaders who came before us.
>
> —Richard L. Freindman[166]
>
> Architecture is the thoughtful making of space.
>
> —Louis Kahn, American architect[167]

Aesthetics solicit emotions, communicate histories, and inform worldviews. Roland Blieker, a professor of international relations, has published several academic papers on the intersection of art and politics. He states in an article discussing art after 9/11, "Prevailing scholarly analyses and policy approaches to global security certainly pay no attention to the role of emotions, even though terrorism is a highly emotional issue."[168] Public open spaces in America have traditionally reflected the values of freedom and the pursuit of happiness. If architecture "has the ability to symbolize certain ideas, values and beliefs due to its existing properties and function which can be recognized … by the audience," it is important to consider the message communicated by homeland security architecture.[169] When done well, the message can be a subtle welcoming to stop and enjoy an open space and can serve as an invitation to participate in civic discourse, while still addressing vulnerabilities and providing a deterrence to bad actors. Poorly designed homeland security architecture creates physical as well as psychological barriers that prevent the people's access to their government and public spaces. The introduction to GSA's security site design manual states:

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[166] NCPC, *National Capital Urban Design and Security Plan*, iii.

[167] Louis Kahn, "The Room, the Street, and Human Agreement," Japan Architecture and Urbanism, June 24, 1971, accessed September 2, 2017, https://www.japlusu.com/news/room-street-and-human-agreement.

[168] Bleiker, "Art after 9/11," 78.

[169] Ismail, "Architecture as an Expression of Political Ideology."

In meeting these responsibilities, we demonstrate how thoughtful security design can represent permanence and encourage citizen participation … can become active public spaces, physical restraints can serve as seating areas or landscape features, and new amenities can both increase the safety of federal employees and integrate our public buildings into their neighborhoods.[170]

Government agencies such as the GSA recognize that terrorist attacks on public spaces are an occurrence of modern life. If aesthetics are not consideration in the design of homeland security architecture at the state and local level, the fabric of American society will be altered. The government has a responsibility not just to protect its citizens, but also to protect the values of the country. In the United States, these values were established by the Declaration of Independence: the right to life, liberty, and the pursuit of happiness. The U.S. government is the custodian of the public realm and open spaces for the use of all citizens. The knowledge and tools to change the message of homeland security architecture from fear and insecurity to strength and resiliency are readily available. Security is not just physical security, but physiological security as well. Neither should be an afterthought, and both must be considered together. The time has come to carefully consider how homeland security architecture is shaping America with stone and steel.

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[170] GSA, *Site Security Design Guide*, 5.

LIST OF REFERENCES

AIA 21st-Centruy Embassy Task Force. *Design for Diplomacy: New Embassies for the 21st Century*. New York: American Institute of Architects, 2009.

American Institute of Architects. *Security Planning and Design: A Guide for Architects and Building Design Professionals*. Hoboken, NJ: Wiley, 2003.

American Planning Association. "APA Policy Guide on Security." March 20, 2005. https://www.planning.org/policy/guides/adopted/security.htm.

American Society of Landscape Architects. *ASLA Security Design Symposium Abstracts July 2004*. Washington, DC: ASLA, 2004. www.asla.org/uploadedFiles/CMS/ Resources/securitydesignabstractfinal.pdf.

———. "General Design Honor Award." Accessed September 7, 2017. https://www.asla.org/awards/2008/08winners/236.html.

Bleiker, Roland. "Art after 9/11." *Alternatives: Global, Local, Political* 31, no. 1 (2006): 77–99.

Briney, Amanda. "An Overview of Urban Geography." *ThoughtCo*. Last revised February 28, 2017. https://www.thoughtco.com/overview-of-urban-geography-1435803.

Centre for the Protection of National Infrastructure. *Integrated Security: A Public Realm Design Guide for Hostile Vehicle Mitigation*, 2nd edition. London: CPNI, 2014.

Coaffee, Jon. "Rings of Steel, Rings of Concrete and Rings of Confidence: Designing out Terrorism in Central London Pre- and Post-September 11th." *International Journal of Urban and Regional Research* 28, no. 1 (2004).

———. "The Visibility of (In)security: The Aesthetics of Planning Urban Defences against Terrorism." *Security Dialogue* 40, no. 4–5 (2009).

Coaffee, Jon, Paul O'Hare, and Marian Hawkesworth. "The Visibility of (In)security: The Aesthetics of Planning Urban Defences against Terrorism." *Security Dialogue* 40 (2009): 489–511.

Coaffee, Jon, and Peter van Ham. "'Security Branding': The Role of Security in Marketing the City, Region or State." *Place Branding and Public Diplomacy* 4 (2008): 191–195.

Department of Homeland Security. "Interagency Security Committee Overview." Last published June 28, 2017. https://www.dhs.gov/interagency-security-committee.

Department of Transportation. "Manual on Uniform Traffic Control Devices." Last modified August 1, 2017. https://mutcd.fhwa.dot.gov/.

FEMA. *Site and Urban Design for Security: Guidance against Potential Terrorist Attacks* (FEMA 430). Washington, DC: Department of Homeland Security, 2007.

General Services Administration. "Lease Security Standards: Instructions for Lease Acquisitions." Accessed September 6, 2017. https://www.gsa.gov/graphics/pbs/ RSL_Security_Addendum_1_R20O3-e_0Z5RDZ-i34K-pR.pdf.

———. "Leasing Overview." Last reviewed May 24, 2017. http://www.gsa.gov/ portal/content/104480.

———. *The Site Security Design Guide*. Washington, DC: GSA, 2007.

Graham, Stephen. *Cities under Siege: The New Military Urbanism*. New York: Verso, 2011.

Grosskopf, Kevin R. "Evaluating the Societal Response to Antiterrorism Measures." *Journal of Homeland Security and Emergency Management* 3, no. 2 (2006): Article 1.

Home Office, Centre for the Protection of National Infrastructure, and National Counter Terrorism Security Office. *Protecting Crowded Places: Design and Technical Issues*. London: Home Office, 2014. https://www.gov.uk/government/uploads/ system/uploads/attachment_data/file/302016/DesignTechnicalIssues2014.pdf.

Homeland Security Research. "U.S. Homeland Security & Public Safety Market—2013– 2020." Accessed September 7, 2017. http://homelandsecurityresearch.com/2012/ 09/u-s-homeland-security-public-safety-market-2013-2020/.

Ismail, Alice Sabrina. "Architecture as an Expression of Political Ideology." Universiti Teknologi Malaysia, August 13, 2010.

Laurie, Alison. *The Language of Houses –How Buildings Speak to Us*. New York: Delphinium Books, 2014.

Lennard, Suzanne H. Crowhurst. "Genius of the European Square." International Making Cities Livable, December 2004. http://www.livablecities.org/articles/genius-european-square.

Light, Jennifer. "Urban Security from Warfare to Welfare." *International Journal of Urban and Regional Research* 26, no. 3 (2002), 607–613.

Marcuse, Peter. "Security or Safety in Cities? The Threat of Terrorism After 9/11." *International Journal of Urban and Regional Research* 30, no. 2 (December 2006): 919–929.

McCann, Barbara, and Suzanne Rynne. *Complete Streets* (PAS 559). Washington, DC: American Planning Association, 2010.

Mueller, John. "Assessing Measures Designed to Protect the Homeland." *The Policy Studies Journal* 38, no. 1 (2010).

National Association of City Transportation Officials. *Urban Street Design Guide*. Washington, DC: Island Press, 2013.

National Capital Planning Commission. *National Capital Urban Design and Security Plan*. Washington, DC: NCPC, 2004. https://www.ncpc.gov/DocumentDepot/ Publications/SecurityPlans/NCUDSP/NCUDSP_Section1.pdf.

Nemeth, Jeremy. "Controlling the Commons: How Public is Public Space." *Urban Affairs Review* 48, no. 6: 811–835.

Nemeth, Jeremy, and Justin Hollander. "Security Zones and New York's Shrinking Public Space." *International Journal of Urban and Regional Research* 34, no.1 (2009): 20–34. doi:10.1111/1468-2427.2009.00899.x.

Nemeth, Jeremy, and Stephan Schmidt. "Toward a Methodology for Measuring the Security of Publicly Accessible Spaces." *Journal of the American Planning Association* 73(2007): 283–297.

Royal Institute of British Architects. *RIBA Guidance on Designing for Counter-terrorism.* London: RIBA, 2010.

Schneier, Bruce. "Beyond Security Theater." *Schneier on Security*, November 13, 2009. https://www.schneier.com/blog/archives/2009/11/beyond_security.html.

———. "The Psychology of Security." In *Progress in Cryptology—AFRICACRYPT 2008*, edited by Serge Vaudenay, 50–79. Berlin: Springer-Verlag, 2008. https://www.schneier.com/academic/paperfiles/paper-psychology-of-security.pdf.

———. "Terrorist Targets of Choice." *Schneier on Security*, February 4, 2011. https://www.schneier.com/blog/archives/2011/02/terrorist_targe.html.

Silberberg, Susan. "Pretext Securitization of Boston's Public Realm after 9/11: Motives, Actors, and a Role for Planners." In *Policing Cities*, edited by Randy K. Lippert and Kevin Walby. Padstow, Cornwall: TJ International, 2013.

Smithsimon, Gregory. 'The Right to Public Space." Metropolitics, March 10, 2015. http://www.metropolitiques.eu/The-Right-to-Public-Space.html.

Timberlake, Kieran. "Winning Design Concept." U.S. Embassy & Consulates in the United Kingdom. Accessed September 7, 2017. https://uk.usembassy.gov/new-embassy-design-concept/.

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