



## **Place-Based Crime Prevention Planning: Cultural Constraints and Applicability in the City of Abu Dhabi, UAE**

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### **Abstract**

Place-based crime prevention planning approaches have been widely employed for combating crime and fear of crime in large metropolitan areas within the US and UK (Schneider and Kitchen, 2008). Despite their fair share of criticism, these approaches have demonstrated success in making communities safer, and have been utilized repeatedly by law enforcement agencies in tandem with urban planners to combat crime. During the last decade, middle-eastern countries and particularly Gulf Cooperation Countries (GCC) have witnessed an increase in crime rates as a result of tremendous growth in metropolitan areas. This growth has been accompanied by large increases in populations and changes in societal and cultural norms due to the large influxes of migrant workers. As a result, law enforcement and regulatory government agencies are paying more attention to crime prevention planning approaches such as CPTED. This paper examines the applicability of place-based crime prevention planning approaches within the cultural context of the middle-east. It explores if these concepts work, are effective, and to which extent could succeed in reducing crime rates. The focus area for the study is the City of Abu Dhabi - the capital of the United Arab Emirates. The city is growing at a rapid pace, and the population is expected to double within the next 15 years reaching a figure of 3 million people. The paper concludes that that place-based crime prevention planning approaches do have a potential to work within such contexts, yet do run into certain cultural barriers that prevent a direct application in favor of a more-customized application of these concepts.

**Keywords: Crime Prevention, Abu Dhabi, Middle East, CPTED, Defensible Space**

### **Introduction:**

The United Arab Emirates – similar to other Gulf Cooperative Countries (GCC) - has historically had very low crime rates as result of its small population count, and high per-capita incomes due to its oil based economy (OSAC, 2011). During the last decade, the UAE gained importance as a as the result of the huge investments in infrastructure initiated by the government in an attempt to position the country to be an economic and

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cultural hub. As the growth continued, the country witnessed an influx of expatriates seeking employment opportunities, with the vast majority of these expatriates working in the construction, services, and banking industries.

The city of Abu Dhabi, the capital of the UAE has witnessed significant growth as a result of the aforementioned dynamics. The capital is home to around 1.2 million people as of 2011 (SCAD, 2011), and is projected to reach a population of 3 million by 2030 (UPC, 2008). With these current and projected increases in population, the city is growing in size at a rather fast rate, and the country's society is changing at an even faster one. With the large influx of people, the once traditional Emirati town has become a sprawling, diverse and multi-cultural city, along with a whole new range of urban challenges and problems- including crime.

In attempt to direct the city's growth, a number of government planning initiatives and agencies were established. More recently, more attention is being given by the authorities to the issue of crime prevention planning especially since long-range planning is currently underway. As a response, this paper attempts to shed some light on place-based crime prevention planning approaches. The paper will explain some of the theoretical concepts behind crime as it relates to the built environment. It will also discuss relevant issues within Abu Dhabi's urban planning scene and society.

### **Theoretical Considerations: Crime and Community**

High levels of crime continue to affect the quality of life for large numbers of people within large metropolitan areas, especially those living in neighborhoods exhibiting trends of decline. Traditionally, and especially in the US, higher levels of crime have been associated with neighborhoods of lower socio-economic status, (Bursik, 1988; Sampson et al, 1997). Still, research over the past few decades has shown that low socio-economic status is only one part of the bigger picture. Other important elements have to be present for the rapid decline, and the higher levels of crime to emerge. Furthermore, not all such neighborhoods are equal in the levels of crime; some have average crime rates when compared to other neighborhoods with more affluent inhabitants, even lower in some cases (Sampson and Groves, 1989; Bursik and Grasmick, 1993; Sampson et al, 1997).

Probably one of the most important elements affecting neighborhood decline and crime levels could be the strength of social ties within the community as outlined by the social disorganization theory and its supporters (Shaw and McKay, 1942, 1969; Bursik, 1988; Sampson & Groves 1989; Bellair, 1997; Sampson et al, 1997; Sampson and

Raudenbush, 2004). According to this theory, social disorganization takes place when social relations within a neighborhood weaken significantly; this leads in most cases to a failure of the informal social control process that would otherwise inhibit crime and disorder within the neighborhood community (Skogan, 1986; Sampson & Groves 1989). In other words, when social ties weaken within a neighborhood, residents no longer can act collectively to control what goes-on in the streets and public areas. The most crucial point here is the failure to supervise or discipline groups of young teenagers engaged in disorderly conduct within the public realm, or even identifying and challenging suspicious strangers within the area. Once this social control aspect is weakened or no longer exists, the area becomes even more welcoming for criminal behavior. Problems such as public intoxication and drug dealing usually become more evident making the area even more attractive for other offenders. This process usually forces residents to withdraw from communal life, and increases the levels of fear while further accelerating the neighborhood decline process. Physical signs of neighborhood decline such as graffiti and abandoned structures contribute greatly to this process also, as will be discussed later in this review (Shaw & McKay, 1942, 1969) Skogan, 1986; Sampson and Raudenbush, 2004).

As for the causes of the social disorganization process, Shay and McKay (1942, 1969) identified socio-economic deprivation coinciding with a concentration of immigrants (community heterogeneity), and residential mobility as the main ingredients for social disorganization. This notion has been supported by the literature over the years despite its fair share of critics, and it still seems to be gaining importance today (Kornhauser, 1978; Skogan, 1986; Bursik, 1988; Sampson & Groves 1989; Bellair, 1997; Sampson et al, 1997; Sampson and Raudebash, 2004; Martinez et al, 2008). Looking at these components closely, socio-economically deprived areas in western societies usually have a high concentration of lower income residents, especially immigrants, migrant workers, and minorities, in addition to female-headed families. Such residents lack money and resources, and are usually socially and economically isolated, therefore cannot easily come together for collective action within their neighborhoods (Sampson et. al 1997). They are also hard to mobilize and lack the ability to secure public goods and services from outside city agencies such as the police department or the city (Bursik and Grasmick, 1993).

On the other hand, it is very common to find a high number of new migrants, in socio-economically deprived or declining neighborhoods. The rental prices are usually cheap compared to other areas, and there is usually little documentation required to rent, with minimal intervention from the authorities. This heterogeneity of the community could

impede the residents' capacity to realize mutual values; it also makes communication between the different residents harder due to language and cultural differences. Furthermore, racial and ethnic tensions between the different neighborhoods groups could exist. This contributes to the weakening of the social-ties, and the increase in crime levels (Shaw and McKay, 1949, 1967; Sampson et. al 1997). It is important to note here that new immigrants in general tend to report crime less to authorities, as they are usually fearful of both the authority and retaliation. Also cultural considerations could make reporting certain crimes -such as rape- shameful, only to increase levels of crime and fear even more (Davis & Erez, 1998)

Finally, residential mobility is the third ingredient in the social disorganization theory. Residents of such disadvantaged neighborhoods usually consider them to be “zones of transition” until they can afford financially to move to a different area. This notion is especially true for migrants, whom usually have very limited economical standings initially. Neighborhood ties are very hard to emerge within such conditions since the residents are mostly un-interested in the neighborhood, and do not consider it home. Also, the continuous changing of residents within the area greatly weakens the chance of any significant ties to emerge, since such ties require a long time to emerge (Shaw & McKay, 1942, 1969; Korhauser, 1978; Sampson & Groves 1989)

### **Crime and the built environment: place-based crime prevention planning**

“One broken window leads to many!” (Wilson and Kelling, 1982, p5)

The built-environment is an important element that could potentially influence crime levels, or fear of crime within city neighborhoods. Although not a cause of crime by itself, it could play an important role in encouraging it, or determining where it takes place, especially when the conditions for social-disorganization are ripe within an area. Over the years, a number of theories emerged that linked the built-environment to crime. Known as place-based crime prevention theories (Schneider and Kitchen, 2002; 2007), they hold a common premise which is the importance of community strength, involvement, and self-policing in the reduction of crime and fear of crime, in addition to the physical features and condition of the built environment.

One of the main theories linking the built environment to crime was Defensible Space theory, as first introduced by Oscar Newman (1973). Influenced by the writings of Jane Jacobs (1961), and Elizabeth Wood (1961), Oscar Newman developed Defensible Space after his studies of a number of public housing projects within the US. He noticed that certain design layouts and features seemed to contribute the higher levels of crime

within the areas of study. Newman suggested that designs which encourage territorial behavior and natural surveillance, while also having clearly defined areas of responsibility and good maintenance, could deter disorderly behavior and crime within the public space, especially since residents of such environments will have better control over them (Newman, 1973). The theory has had its share of critics (Mayhew, 1979; Booth, 1981; Merry, 1981), yet it has gained importance and acceptance over the years, with a number of real life applications especially in the public-housing sector (Cisneros, 1995).

A second major theory in place-based crime prevention is Crime Prevention Through Environmental Design, better known as CPTED. Developed by C. Ray Jeffery in 1977, and later expanded by Timothy Crowe (2000). Although distinct from Defensible Space, it shares similar concepts of natural surveillance, boundary definition and image enhancement, but is not specific to public housing or housing in general. The theory has had wide support and adoption from law enforcement agencies in the US and the UK, while also providing some significant real life results (Schneider and Kitchen, 2002). Originally, CPTED was considered to be more comprehensive than Defensible Space since it expanded beyond the environment-only focus to include issues of public-space management, activity generation, and communication between the different neighborhood parties (Crowe, 2000; Schneider and Kitchen 2002; 2007). Today, the CPTED theory and practice have been moving away even more from the limited built-environment only focus, to include themes such as sustainable design, urban meeting places, community and youth participation, and human scale neighborhoods. This expansion of the theory has been known as 2nd Generation CPTED (Cleveland & Saville, 2003, Schneider and Kitchen, 2007)

A third theory, and probably one of the most famous theories relating to crime and the built environment is the “Broken Windows Theory”, by Wilson and Kelling (1982). According to its authors, the first signs of decay within the neighborhood environment, will soon lead to disorderly conduct and crime if remained unchecked and uncorrected. An unattended, crumbling built-environment or a building with broken windows will soon indicate that no one cares about the area; the same applies to the unchecked panhandlers on the street, or disorderly youth – all could be considered broken windows. Once these problems are not corrected, they could signal to potential offenders that the risks of being stopped, or held accountable within the area are low; in other words, no one cares within the neighborhood. This could increase crime and fear of crime rapidly within the area (1982).

The theories discussed here briefly are some of the most famous place-based crime prevention theories within the US context. A number of other theories/guidelines of equal importance have emerged in the US and Europe over the years. Examples of these are Situational Crime Prevention by Clarke (1997), Routine Activity Theory by Cohen and Felson (1979), and ‘Secured by Design’ program in the UK, in addition to others (Schneider and Kitchen, 2002; 2007). Despite their differences, they share some of the basic premises of the three theories discussed here, mainly that a poorly designed and poorly maintained built-environment could encourage delinquency and criminal behavior, increasing by that crime, fear of crime, disorder, and neighborhood decline.

### **Land-use and crime**

When examining residential neighborhoods, the literature indicates that certain non-residential land-uses, could contribute to the neighborhood decline and higher levels of crime in some cases (Taylor and Gottfredson, 1986; Taylor et al, 1995; McCord, 1997). The impact level of such land-uses varies depending on the types and distribution of these land-uses. It also depends heavily on the context, neighborhood layout and design, socio-economic conditions, and existing crime levels. (Sampson & Raudenbush, 2004; Wilcox et al 2004).

The non-residential land-uses could contribute to the decline in a number of ways: First, and relating to informal social control networks, non-residential land-uses breakup or weaken these networks since they represent a break in the residential fabric. Generally speaking, a resident of the neighborhood will keep an eye on the area continuously vs. a business owner who only observes the vicinity of his business during business hours. Secondly, these businesses attract large numbers of strangers to the neighborhood, which usually undermines residents’ abilities to identify who-is-who, especially identifying those with criminal or suspicious behavior (Brantigham & Brantigham, 1993; Taylor et al, 1995).

The type of land-uses complicates this issue even further; for example bars and shops selling alcoholic beverages contribute to the disorder within area as a result of alcohol consumption by their clientele, as could Motels. Vacant lots, parking garages, and abandoned buildings could become hangout spots for youths and a base for disorderly behavior; they also affect the area’s image negatively. High Schools also are generators of groups of youths and have similar impacts. Finally, discount stores, pawn shops, and convenience stores are traditionally places for suspicious transactions, therefore could attract even more criminal activities (Brantigham & Brantigham, 1993; Wilcox et al., 2004).

Meanwhile, planning decisions, especially those relating to positioning transportation networks add to neighborhood problems in some cases. Crime rates are usually elevated near major streets and highways, or with grid-style roadway networks within residential neighborhoods. These transportation routes increase neighborhood permeability, and allow easy access and escape routes for strangers and offenders therefore contributing to disorder, and making it easier for crime to occur (Brantigham & Brantigham, 1993; Newman, 1996; Schneider & Kitchen, 2007). Furthermore, transportation hubs such as bus stations, metro, and train stations could increase the levels of crime and fear of crime within an area. These points represent what is known as crime ‘hot spots’, as they attract large numbers of offenders. For example metro stops potentially weaken residents’ ability to recognize strangers and control their environment, due to the high traffic they create. They also attract criminal activity due to this high traffic which translates into more disorderly conduct and opportunities for crime. Examples of this would be an increase in pan-handling, public intoxication, drug dealing, pocket-picking, and violent crimes in the vicinity of transportation hubs (Sideres, 1999; Mcord et al, 2007).

### **Crime rates and law enforcement in Abu Dhabi**

Detailed crime statistics are not available to the public in the UAE. Instead official crime rates figures are only released through official government statistics which do provide for a brief description of crime categories. Internationally, the UAE is consistently ranked in the lower percentile of countries throughout the different crime categories. For example, when comparing the UAE (Population 8.5million) to Sweden (Population 9 million) the robbery rate per 100,000 was (11.9) for the UAE vs. (94.4) for Sweden. This trend continues throughout most crime categories (European Institute for Crime Prevention, 2010)

In Abu Dhabi emirate, latest government statistics indicate that there were around 63,005 reported crimes, out of these 59, 673 were considered misdemeanors, and 1,791 were considered felonies. When looking at the city of Abu Dhabi only, the city was responsible for 63% of all reported crimes, which totals to around 39,693 reported incidents (SCAD, 2011). No break-down of crimes by type is available, but in general serious crimes (both violent and nonviolent) such as murder and robberies remain very rare and far apart.

### **Community characteristics with implications for crime**

The community composition in Abu Dhabi is a complex one due to the large influx of expatriate workers seeking employment. Out of the total 1.2 million residents of the city

and its suburbs, only 20% are nationals - a figure which translates into roughly 200,000 UAE nationals and around 1 million expatriates (SCAD, 2011). Furthermore, the majority of expatriates in the UAE originate from South-Asian countries, including India (1.75 millions), Pakistan (1.25 millions), and Bangladesh (500,000). The remainders of the expatriate population are mostly of Arab, European, and North American origins (Gulf News, 2009).

In addition to this very diverse community, the income levels are also very different depending on profession and nationality in some cases. The UAE in general (and Abu Dhabi in particular) has one of the highest average per capita GDPs in the world (88,000\$ as of 2009) (SCAD, 2009). The income levels for the nationals are significantly higher than the average national GDP due to major business activity and investments, in addition to government assistance and job placement programs. On the other hand, the majority of the expatriate workforce consists of blue collar workers - either skilled or unskilled- with most of the unskilled working in construction industries. These 'unskilled' workers receive very low monthly salaries in comparison to the national GDP, and mostly originate from the countries mentioned earlier. The professional expatriates though do receive competitive salaries which are on par with the country's nationals in some cases.

The substantial cultural differences between the country's nationals and this colossal group of foreign workers create significant tensions in the city's communities - weakening by that the sense of community. The presence of large numbers of mostly male, bachelor workers living next door to Emirati and other expatriate households has proven to be a point of discontent for the (Gulf News, 2012). In a country with traditionally conservative Muslim and Bedouin-derived traditions, gender sensitivities are expected to be adhered to within the public realm and issues like the harassment of women (even if minor and even if perceived) are not taken lightly. This tension has forced the authorities to intervene, and adopt extreme measures such as moving the workers out of the city and into worker only housing projects in the suburbs. Workers for the most part are treated with mistrust in the city, and are accused of being responsible for robberies, violent crimes, noise, littering, begging and even diseases in some cases, although as evident from the crime rates, such perceived threats are hugely exaggerated. One more important point to be added here is that most work contracts in the country are renewed on a three year basis -if not shorter, and there are no paths towards citizenship and permanent stay in the country. This is further complicated by housing market and rental value fluctuations. These conditions create a very mobile society, and make it very hard for strong communal ties to emerge. These elements

collectively create a classic scenario of social disorganization as described by Shaw and Mckay.

### **Built-environment conditions with implications for crime**

Abu Dhabi is an island city, surrounded by water from three directions and has a very limited usable land-mass. Historically, city planning was not a top priority for the local officials, and zoning codes were very relaxed – only to start changing recently (UPC, 2007). As the population exploded during the last decade, the city became very congested. Buildings began expanding vertically especially with the limited available land. As a result, two main housing typologies appear to be the norm: residential towers which include a retail component on the ground floor, in addition to office space in some of the towers. Residential villas are the second main housing typology in the city. Villas are usually inhabited by the local population due to the higher cost and high rental values. In some cases, these villas are also converted in office space providing for no separation between residential, commercial, or retail land uses. This mix of land uses threatens the residential character of the different neighborhoods, weakens the sense of community, and makes it harder for communal ties to emerge. Residential neighborhoods are filled with shops, workshops, car repair facilities, and offices –even some government offices are located in some converted residential villas (Figure 1). Despite the convenience of these arrangements, this makes it extremely hard to recognize who is a resident vs. a passer-by or in the area for business reasons. This could lead to an increase of crime rates, especially as the population continues to increase, and if economic conditions take a turn to the worse.



Figure 1: Mixed land uses create a chaotic environment in the city. Source (author)

The transportation networks within the city are another challenging factor: the city as a whole is completely dependent on the automobile due to higher income levels, cheap gasoline, weather severity, and the absence of meaningful public transport networks. The street networks follow a grid system even within residential areas. Parking is a huge problem within the city due to the abundance of cars, and no requirements for parking garages in the residential towers until recently. This resulted in streets that are packed with cars parked on both sides and on the sidewalks or in the middle of the streets in some cases (Figure 2). These elements only add to the sense of chaos in residential neighborhoods, and lead to declining neighborhood images and signs of ‘disorder’.



Figure 2: Car parking in the residential areas. The residential towers have no parking arrangements. Source (author)

The design of residential villas is also an issue with implications for crime. Firstly, adjacent residential plots are divided by a narrow right-of-way strip of land as dictated by the municipality requirements. This right of way requirement designed for utilities resembles an alley, and soon becomes an area of neglect and an access point for people filtering through the neighborhood (Figure3). In some cases, some residential villas use at a storage area which affects neighborhood images even more. Secondly, due to privacy and cultural constraints, residential villas are surrounded usually by high walls to maintain privacy. These walls act as a double edged sword since they block residents from observing their neighborhoods as encouraged by the concept of ‘eyes on the street’.



**Figure 3:** Typical right-of-way area between residential villas. Source (author)

### **Causes for reduced crime rates and is crime prevention planning needed?**

Despite all the problematic aspects mentioned above, crime rates appear to be very low as discussed at the beginning of the paper. This is rather contradictory considering that the social and environmental conditions appear to be conducive of criminal activity. Crime occurrences remain rather rare, and fear of crime is not an issue often mentioned (further research will explore this in the future papers). The reasons for this could be multiple: Firstly, unemployment levels within the emirate of Abu Dhabi are relatively low, especially within the expatriate population (around 6% as of 2008) (SCAD 2011). This could be mainly the result of a solid economy and immigration policies where residency in the country is tied directly to employment. Secondly, most those living in Abu Dhabi and the UAE in general are residents of the country for economic reasons. Any criminal activity could lead to job loss and deportation (Ministry of Labor, 2001). Most of expatriates, even those on the lower end of the economic spectrum will most likely not risk losing their jobs since a good majority of expatriates support family and

investments in their home countries through remittances. Thirdly, Abu Dhabi has a modern, well equipped police force, with a strict law enforcement regime. Otherwise minor issues such as public intoxication could lead to jail time (The National, 2010). Finally, as a majority Muslim society with a strict religious outlook, certain cultural constraints such as the ban on alcohol consumption (for Muslims) and the ban on public drunkenness for could have an impact on crime. Dress code regulations, conduct in public places, and strict punishment are all elements that could help keep crime rates at bay.

Considering these previous points, crime prevention planning might not be an immediate necessity, but as the population grows and social norms change, and if the population of Abu Dhabi doubles by 2030 as expected, applying these principles in new developments could prevent future problems within the city. More importantly of some concepts in existing neighborhoods could help reduce signs of disorder which are rampant especially within the older residential areas.

### **Conclusions: limitations on current place-based crime prevention in Abu Dhabi**

In order for place-based crime prevention planning to work as outlined by its principles and theories, the built-environment factors within the residential areas should be conducive to the strengthening of community ties. In the current conditions within Abu Dhabi, and if the principles were introduced into the existing built environment, they might have a very minimal impact – if any, and for a number of reasons. First of all, a separation of land uses within the residential neighborhoods is crucial. Though most modern urban planning theories encourage smart growth and the mix of land uses (Congress of New Urbanism, 2001), the current status in Abu Dhabi is rather odd as it has too many retail and commercial facilities within residential area (too many eyes on the street! ). Secondly, overall improvements in the built environment should be introduced - these include parking solutions and open space improvements otherwise the signs of disorder will remain rampant. Finally, the traditional building practices and some current zoning and building practices should be revised. Residential plots should be adjacent and the neglected right-of-way parcels between residential villas should not be the norm. Also, regulations pertaining to the exterior of residential villas, especially the heights of outside walls and fences should be introduced.

As the built-environment issues are addressed, two main obstacles remain. First, the transient nature of the society and its large number of workers are serious impediments to community development. These will remain mostly unchanged unless serious changes to employment conditions and immigration policies take-place. This change is a highly

unlikely to happen within the near future. Secondly, crime prevention planning principles rely heavily on the activeness of the residents of an area, their sense of vigilance, and their willingness to come together with others living nearby. This might be the hardest element to materialize due to gender-related cultural constraints, language barriers due to the heterogeneity of society, extreme weather conditions which limit the usage of communal space and an added layer of maids, butlers, and drivers whom act as a buffer between different neighborhood residents. These cultural aspects are unlikely to change any time soon, and remain one of the biggest obstacles to successful implementations of crime prevention planning principles.

Nevertheless, planning for the road forward, and considering these principles in current and future developments within the city is the way to go. The principles are simple to apply, and have benefits beyond crime prevention. They are logical, and do improve the quality of residential areas. Most importantly, they help combat disorder in the built-environment, which is the biggest issue Abu Dhabi is currently facing.

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