

A Comparison of Gated and Non-Gated Home Environments



BY

NIDA NOSHEEN

Dr. Muhammad Ajmal

NATIONAL INSTITUTE OF PSYCHOLOGY

Centre of Excellence

QUAID-I-AZAM UNIVERSITY

Islamabad- Pakistan

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BY

Nida Nosheen

A dissertation submitted to

Dr. Muhammad Ajmal

NATIONAL INSTITUTE OF PSYCHOLOGY

Centre of Excellence

QUAID-I-AZAM UNIVERSITY

Islamabad- Pakistan

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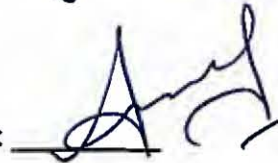
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Department of National Institute of Psychology
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Student Name: Nida Nosheen.

Signature: 

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a) External Examiner 1: Name
(Designation & Office Address)

Prof. Dr. Muhammad Tahir Khalid

Signature: 

b) External Examiner 2: Name
(Designation & Office Address)

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Prof. Dr. M. Anisul Haque

Signature: 

Supervisor Name: Prof. Dr. M. Anisul Haque

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FOREIGN EVALUATORS

Gifford R Dr., Ph.D.

Professor of Psychology & Environmental studies FRSC,
FAPA, FCPA, FAPS, FIAAP
The University of Victoria at Department of Psychology,
Victoria British Columbia
V8W 3P5 Canada

Frieze H. Irene., Dr., Ph.D.

Emeritus Professor of Psychology
Department of Psychology
University of Pittsburgh 3137
sennott square 210 south bouquet
street Pittsburgh

A Comparison of Gated and Non-Gated Home Environments

BY

Nida Noshcen

Approved by



Prof. Dr. Muhammad Anis-ul-Haque
Supervisor



Prof. Dr. Muhammad Asir Ajmal
Co-Supervisor

External Examiners



Prof. Dr. M. Tahir Khalily
External Examiner



Prof. Dr. Tanvir Akhtar
External Examiner



Prof. Dr. Rubina Hanif
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It is certified that PhD Dissertation titled “**A Comparison of Gated and Non-Gated Home Environments**” prepared by **Ms. Nida Nosheen** has been approved for submission to Quaid-i-Azam University, Islamabad.

(Prof. Dr. Anis-ul-Haque)

Supervisor



(Dr. Asir Ajmal)

Co-Supervisor

Dedication

To my Father Muhammad Mushtaq, who raised four beautiful,
independent, and empowered women including me.

CONTENTS

List of Tables	i
List of Figures	ii
List of Appendixes	vii
Acknowledgment	viii
Abstract	ix
Chapter I: Introduction	1
Evolution of Residential Physical Environment	2
Problem Definition: Rationale for the focus of Home Environments	9
Physical Environment (Gated/Non-Gated Communities) and	12
Territoriality	
Linking and defining Gating and territoriality for the present study	17
Rationale, Objectives, and research questions for the present Study	18
Objectives	22
Research Questions	23
Focus, Proposed method, and conceptual development of the thesis	24
Territoriality: A Spatial Behavior	28
Spatial Behavior	30
Types of Spatial Behavior	30
Territoriality: understanding human-environment relation	32
History of Territoriality	33
Significance of territoriality	34
Human Territoriality	38
Territoriality and Physical Environment	48
Territorial production and types of territory	50
Urban Space and Territorial Organization	56
Micro scale (personal space)	59
Meso scale (home and neighborhood)	60
Macro scale (Home range)	63
Models of Territorial Functioning	64
Territorial behaviors	71
Territorial markers	73

Personalization of space	75
Residential environments and territorial behaviors	75
Defining human territoriality for the present study	76
Environmental Cognition/ Territorial Cognition	77
Information processing theory of cognition	78
Situativity theory	79
Environmental cognition in this study	82
Overview of Methodological issues in investigating physical environment in environmental Psychology Research	83
Explaining the guiding theoretical Conceptualization of the Present Study	91
Chapter II: Method	94
Research design	94
Research Method	95
Sampling strategies and participant recruitment	97
Overview of selected research sites	99
Research site A (Gated) EME housing society	100
Research site B (Gated) Eden canal villas	100
Research site C (Non-gated) Allama Iqbal Town	101
Research site D (Non-gated) DHA	101
Ethical considerations	102
Data collection process	102
Mode of analysis	104
Grounded theory and case study	106
Chapter III: Results	112
Physical ease	115
Spatial mapping of gated home environments	116
Territorial physical markers as symbolic communicators	128
Available spatial resources	132
Local code of living	136
Functional ease	137
Functionality of spatial resources	138

Functionality of social resources	146
Functionality of local management	151
Psychological Ease	154
Sense of ownership	154
Sense of belongingness	158
Sense of control	165
Sense of Home	173
Territorial fulfillment	178
Chapter IV: Discussion	181
Human territoriality: physical dimension	181
Territorial organization of home environments	182
Territorially organized home environment	183
Territorially disorganized home environment	187
Territorial organization: physical markers as symbolic communicators	194
Territorially organized vs. disorganized living: Spatial resources	201
Territorially organized living: Resource convenience and Spatial aesthetics.	205
Human territoriality: socio-cultural dimension	210
Predictable social interaction in Gated home spaces	212
Human territoriality: Psycho-cognitive dimension	215
Psychological dimension: sense of ownership	215
Psychological dimension: sense of belongingness	220
Psychological dimension: territorial control	229
Psychological dimension: sense of home	235
Perception of territory: territorial cognition	238
Spatial factors within gated home environment	239
Socio-cultural factors within gated home environments	240
Interpersonal/ individual factors within gated home environments	241
Conclusion and emergent explanatory model of residential territoriality	242
Limitations	248

Future suggestions	249
References	252
Appendices	279

LIST OF TABLES

Table #	Title	Page #
Table 1	Conceptualization/definitions of human territoriality	45
Table 2	Hierarchy of urban communities	63
Table 3	Demographic Information about Participants at both Sites (Gated communities)	110
Table 4	Demographic Information about Participants at both Sites (Non-gated Communities)	112
Table 5	Functionality of territorial markers, geographical size, and sense of home	122
Table 6	Perceived permeability across two gated sites	126
Table 7	Desire of mobility across two gated sites	129
Table 8	Theme of physical markers as inward symbolic communicator and relevant codes	130
Table 9	Theme of physical markers as outward symbolic communicator and relevant codes	132
Table 10	Accessibility of spatial resources	141
Table 11	Utilization of spatial resources	142
Table 12	Conceptual notion of being served and being given	144
Table 13	Perception of gated community and selected verbatim	163
Table 14	Direct and indirect intervention behavior of gated communities“ participants	169
Table 15	Passive actions and behaviors over uncivil activity	172
Table 16	Perceived control, resident“s role, perception of management and resulted control	173

LIST OF FIGURES

Figure #	Title	Page #
Figure 1	Land use and urban growth	12
Figure 2	Conceptual development of the present thesis	28
Figure 3	Settlement territories in the classical era and territorial system according to resource allocation	36
Figure 4	Flow diagram of human territoriality	49
Figure 5	Different scales of territories in urban space	58
Figure 6	Theories of urban territorial organization	60
Figure 7	Conceptual model of human territorial functioning	68
Figure 8	Territorial functioning at the residential scale	71
Figure 9	Two contrasting environmental cognition paradigms: Situativity Theory and Information-Processing Theory	82
Figure 10	Guiding theoretical conceptualization of the study	91
Figure 11	Key features of grounded theory (Glaser & Strauss, 1967)	107
Figure 12	Concepts measured, data types and data tools used in the present research	109
Figure 13	Map of initial open, axial, selective and theoretical coding, and relationship between axial and selective coding for Gated home Spaces	114
Figure 14	Map of initial open, axial, selective and theoretical coding, and relationship between axial and selective coding for non-Gated home Spaces.	115

Figure 15	Theme of Physical markers along with focused codes	117
Figure 16	Sketched layout map of EME society and seven gates. The main gate and gate no. 2 are functional access points	118
Figure 17	Sketched layout map of Eden Canal Villas and its Main gate. The main gate is the only gate available and is used for both entry and exit	119
Figure 18	The permeability points on layout map of Ravi block, Allama Iqal town	124
Figure 19	Permeability points on layout map of DHA Phase V, Block A	125
Figure 20	Multiple recreational areas at EME i.e., sports complex, children’s park, Swimming pool, and cricket stadium and eateries.	133
Figure 21	Multiple recreational areas at Eden canal villas i.e., Theater for social gatherings, children’s park, and tennis court.	134
Figure 22	Pictures compilation showing the main mosque at EME	135
Figure 23	Pictures compilation showing the only mosque in Eden and plot allocated for graveyard	135
Figure 24	Pictures compilation showing the market areas, banks, Hospital, and school located in EME	136
Figure 25	Pictures compilation showing the small library, dispensary, and welfare office in Eden canal villas	136
Figure 26	Pictures compilation showing the instructions on gate of EME park, sign boards in EME	137

Figure 27	Pictures compilation showing the instructions Picture Instruction board at the gate, board presenting rules of society	138
Figure 28	Category of functional ease along with subcategory and focused codes	139
Figure 29	Comparative social setting and social interaction across gated and non-gated research sites	152
Figure 30	Subcategory of sense of ownership along with related focused codes	156
Figure 31	Process of territorial identity for residents of gated residential developments	156
Figure 32	Subcategory of sense of territorial attachment along with related focused codes	160
Figure 33	Subcategory of perceived territorial control along with relevant themes	166
Figure 34	Subcategory of sense of home along with emergent themes and relevant expressions	176
Figure 35	The emerging themes of territorial fulfillment	180
Figure 36	Pattern of physical permeability and territorial control in near home space within gated and non-gated research sites	190
Figure 37	Pattern of perceived permeability and sense of safety in near home space within gated and non-gated research sites	194
Figure 38	Physical layout and its impact on resident's sense of control and safety in near home space within gated and non-gated	194

	communities	
Figure 39	Picture showing the entrance of Eden canal Villas (entrance/ Approachability)	198
Figure 40	Picture showing the entrance of EME housing society (site A)	199
Figure 41	Compilation of pictures of the entrance of EME housing society	199
Figure 42	Sophistication of physical markers and its impact on outward symbolic communication along with factors of community size and community benefits among gated research sites	201
Figure 43	The exclusive and non-exclusive use of spatial resources within Gated and Non- gated research sites	205
Figure 44	The exclusive and non-exclusive use of spatial resources within Gated and Non-gated research sites	208
Figure 45	Spatial aesthetics of EME (site A)	209
Figure 46	The spatial aesthetics of Eden Housing society (site B)	210
Figure 47	Patterns of social settings and social interaction within gated and non-gated research sites	215
Figure 48	Process of territorial identity for gated research sites	217
Figure 49	The process of territorial identity for non-gated research sites	217
Figure 50	The monument placed in front of EME housing society	219
Figure 51	The monument placed in front of Eden Canal villas and on the right side a view of mini theater	220
Figure 52	Two physical attributes (gated and non-gated) and their	222

	impact on territorial attachment	
Figure 53	Patterns of territorial attachment and care taking attitude within gated and non-gated research sites	223
Figure 54	Patterns of strong and weak territorial attachment and care taking attitude within gated research sites	224
Figure 55	Projecting the centrality of near home territories (Tayler & Brower, 1985) and its impact on spatial control within gated and non-gated near home territories	233
Figure 56	The pattern of perceived active control on both individual and group level within gated research sites	234
Figure 57	Pattern of perceived passive control on both individual and group level within gated research sites	235
Figure 58	Physical, socio-cultural, and interpersonal/ individual factors that impact territorial perception of residents within gated research sites	240
Figure 59	Emergent explanatory model of residential territoriality	245
Figure 60	Emergent model of residential territoriality	248

LIST OF APPENDICES

S.No	Title of Annexures
Appendix-A	Interview Guideline
Appendix-B	Bio Data Form
Appendix-C	Consent Form
Appendix-D	Permission Letter for Field Work
Appendix-E	Layout Map
Appendix-F	Layout of Housing Society

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Abstract

Home, a primary territory allows people to exert control over its space. The home environments dictate behaviors and attitudes of its inhabitants. This dissertation explores the construct of human territoriality in urban residential environments. Two urban lay outs of residential physical environment (gated and non-gated home spaces) were selected to explore the phenomenon of territoriality. The concise understanding of the literature on residential territoriality and researcher's initial observation led to the counter-intuitive assumption that gated communities are "territorially rich urban spaces". Taylor & Brower (1985) theorized the model of near home spaces and said that „Home does not end at front door, but extends beyond“, they believed that near home territory contains psychological significance. The present dissertation conceptualized gated home space as near home territory and labelled it as territorially rich environment, which will contain psychological significance for its residents and will also facilitates the territorial understanding among its residents. contrary to this, non-gated home spaces by being „territorially lacked environment“ will differ in terms of psychological significance and territorial sense making. Semi-structured interviews, field observation, interactive participant observation and voluntary photography were the data collection tools. Grounded theory was used to generate theoretical ideas grounded in the data. The findings negate Taylor's (1985) assumption that territorial functioning can be explored in micro scale settings and would not be apparent on meso scale. The present dissertation explored residential territoriality on meso scale (neighborhood level: gated and non-gated). The emergent theory states that spatial organization of physical environment can provide physical and functional ease for the occupants, which in turn would lead to psychological ease (place attachment and

belongingness) and spatial fulfillment (trust over the resource capacity of occupied space). Physical ease, functional ease, psychological ease, and territorial fulfillment are four components of residential territoriality identified by the emergent theory. The emerging idea of residential territoriality proposes that the physical built environment of home spaces exists to support not only a household within a residential community, but also its occupants' daily routine. It also provides guidance for measuring the physical characteristics of a home setting that might help residents feel more at home and establish spatial identities. Finally, the territorial notion will differ depending on the physical, social, cultural, and interpersonal/individual contexts.

INTRODUCTION

Chapter 1

Introduction

In the kingdom of nature, human beings live while sharing and interacting constantly. The interconnection between environment and humans is reciprocal yet quite influential in a silent manner. The relationship of the built environment and human behavior exists significantly and beautifully across the globe. Nonetheless, the core value of this unseen phenomenon is undeniable and since years, residential environment has been examined by many researchers with the aim of improving residents' interaction with both each other and the environment. Most sociological and psychological studies of housing have addressed residents' personal interaction with their environments, by identifying features of the environment and personal characteristics that affect individual differences in their decisions to stay in the same place or to relocate. Within the field of environmental psychology territoriality is one of the spatial behaviors that explains human's relationship with a certain territory. This territorial understanding can be achieved by asking two fundamental questions: 1) how people impact (transform) a certain territory (built environment) and, 2) how the physical attributes of a certain territory can facilitate or hinder occupants living experiences in it, which in turn can impact the occupants territorial understanding.

In the present study gated and non-gated neighborhoods are two residential environments (territories) planned or built by city developers and the physical attributes and living arrangements offered by these two residential environments would impact on residents living experience and relationship with their residential community and could be translated into their 'Territorial understanding'.

Evolution of Residential Physical Environment

Personal space is a concept about individual behavior and the use of space to control the interpersonal environment (usually refers to the area around one's body). Territoriality refers primarily to the behavior of individuals and small groups as they seek control over physical space (Tayler, 1988), but recently, the concept has also been used to state attempts to control objects, roles, and relationships (Brown, Lawrence, & Robinson, 2005). Territoriality can be referred as "a pattern of behavior and attitudes held by an individual or group usually based on perceived, attempted, or actual ownership or control of a definable physical space, object, or idea". It leads us to mark or personalize our territory to signify our 'ownership' and to engage in a variety of behaviors to protect it from invasion (Hutchison, 2015) including the role of Behavioral patterns and cognition in building a reciprocal relationship along with the environment.

Poerteous (1977) explained this relationship as two successive processes and further added that it is human who transforms the environment (in form of urban design and planning, thus making environment a human artifact which may be planned or may be unplanned) and that transformed environment in turn influence human behavior. Similarly, Edney (1974: 966) discussed that *"environments and contiguous behaviors serve each as determinants and effects and the relationship between environment and space is multifaceted."*

Moreover, Lee (1973) argues that *"architects and planners manipulate space, and in return space governs behavior"*. This interrelation can be defined as bilateral or socio-spatial dialectic in which place is structured by social life resulting in the

shaping and transformation of social life by place. This relationship is bilateral while determining that physical layout alone cannot serve as a sole element of human behavior and cognition or further putting human behavior or cognition isolated \from the space. To put it in simple words humans relationship with their physical environment is bilateral, not only humans are capable to transform or modify their physical environment (built environment: for example in view of present study, developing and designing gated or non-gated residential neighborhoods) but certain features or attributes of physical environment can also impact human behaviors and cognition (gates and walls discourages entry of outsiders which in turn could invoke sense of security and community in its residents)

Modernity and residential physical environment. Throughout 20th century, the understanding of human-environment relationship has been evolving, whereas, during the early decades of last century, physical environment has been defined as an influenceable characteristic to manipulate human behavior. In environment-behavior studies and environmental design studies, physical environment was regarded as a ~~m~~mechanism for achieving desired socio-spatial goals.” and according to Modernists, the physical design of a space is considered a stimulus for shaping the behavior of people inhabiting it. Industrialization era surfaced various social and environmental problems which later was attributed to unplanned and rapid urban growth. To counter the above-mentioned problem the concept of ‘community planning’ started to emerge in order to recreate the urban communities.

To cater the emerging social and environmental problems, Perry came up with the ‘neighborhood unit formula’ to form planned communities in modern cities

(Skaburkis, 1974). The concept of planned neighborhood was proposed to fulfill social needs (Banerjee & Baer, 1984) and mending the social decay. It was an attempt to use spatial design to create neighborhoods that could facilitate social life and social cohesion. The idea of 'planned neighborhood' was based on the notion of 'territorial contiguity' which assumes that people living within proximity of each other and share resources and amenities eventually form a community (Skaburkis, 1974). Environmental determinism was prominent in modernist movement and the way it defined the role of the urban designer as the 'social engineer' had made them fail to meet the human needs in their designed communities. The overt behavior patterns of inhabitants and physical layout of the communities designed under such patterns and schemas usually were unable to compensate the needs of people and hardly were based on resident's interests (Lang, 1994). Furthermore, the interrelationship between physical environment and social behavior of its occupants is more complex than assumed and needs further investigation, which has been at heart of environment-behavior studies and environmental psychology.

Modernist movement engrossed more over human-community aspect creating an object-based approach whilst ignoring human-interaction or subject-based dimension i.e., human cognitions and experiences. The critiques of modernistic-deterministic approach to study human-environment relation paved way to more subject-oriented approach. the focus within the fields of human geography and environmental psychology shifted to behavioral and cognitive aspects of human experiences within the physical environment.

Human geography is the field of geographical science which deals with the

human spatial behavior and its primary focus is on the microlevel human spatial behavior which is broadened to macrolevel human spatial behaviors (Anderson & Tindall, 1972). In early 1970s and later, further development in the field of environmental psychology led to research which highlighted human interactions with corresponding physical environment and how both can further adapt to each other (Stea & Blaut, 1973). Despite the emergence of the field of environmental psychology in 1970s, there was a lack of theoretical insights which could elaborate the impacts of physical environment and human behavior and its vice versa role.

To further the debate, the concept of territoriality, which is the main focus of this dissertation, emerged from ethological studies in 1920s and later environmental psychology adopted it as well to fill the gap between “the attributes of molar environment (physical dimensions of a territory, its appearance, boundaries, and geographic relationship to others) with organism’s behavior” (Edney, 1974). The two-phase design was introduced to study territorial behavior which consists of programming phase and post-occupancy evaluation phase (POE). The programming phase focuses on the designing and creation of a human physical environment and after occupancy, POE is the most important phase as it not only reviews the existing structuration but also helps researcher to fill the gaps and holes from real life experiences of inhabitants. This socio-behavioral approach to recognize the affiliation between human and physical environment can be beneficial in creating more people-centric designs and understanding human-environment relations (Horayangkura, 2012).

From 20th century onwards, research on human-environment relation emerged

while helping architects and environmentalists to plan and design communities according to human-centric needs. The inclusion of 'territoriality' into the fields of environmental psychology and human geography also seems productive yet there are multiple avenues which still need to be explored for building a better correlation between environment and human living experience. To add further into this human-environment relation, there are variables like time-space which play an important role in designing human territoriality. The societal and economic order has huge impact on the human-environment relations as well as urban design.

Aside from that, it's also worth noting that human-environment relationships vary in time and space. As a result, throughout history, major shifts in societal and economic order changed both the urban order and human-environment relationships. Place and organizational patterns were intertwined in the pre-industrial era, but later in the industrial age, place was arranged according to functional divisions, and so people and place order were separated (Castell, 2010). The 'people order,' which entailed mixing individuals from various classes in the same area, gave way to a 'place order,' which entailed segmenting people and activities by location (Lofland, 1973 cited in Taylor, 1988:167). In response to this new arrangement, new settlement patterns such as residential zones emerged (Taylor, 1988). It eventually demarcated such new residential zones during industrial era (Taylor, 1988) and consequent changes could be seen in societal patterns and urban order. Moreover, beginning in the late twentieth century, increased mobility and changing sociocultural patterns that reshaped the urban order had an impact on human-environment dynamic. Although individuals are still place dependent, the relationship between human behavior and the physical environment has taken on a variety of meanings.

The scientific advances in communication and transportation technologies in late 20th century changes the conventional understanding of human-place relationship to much extent. The idea of a place for social and economic relations has been highlighted while making the notion of spatial proximity as less important. The idea of propinquity (nearness) lost its meaning and the possibility of community without propinquity as communication and transportation modules changed rapidly and establishing that a sense of community within a specific spatial range does not necessarily defines a territory (Webber, 1964).

Globalization and the advent of technology changed the geographical fluidity of the social and economic life, thus, the significance of environmental design and place in influencing human behavior to gain certain desired community goals was cast a shadow over. Despite the arguments against the importance of place; to develop human communal ties and how it may impact in a negative way for the development of community, multiple theorists still argue in the favor of a place as it impacts multiple aspects of human behaviors. As a result, according to Brain (2005), attachment to specific places has been asserted as a very important part of individuals' cognitive, emotional, and moral development in modern society, as a medium through which we maintain our sense of self and orientation to the world, and as a tie to the social world that can be sustained even as those around us pass away.

The development of ever-growing virtual world and arguments in favor of global communities may favor the virtual space over physical space but there are studies which shows that even digital social relations also favor similar physical location. Badger and Quoctrung (2018), for example, look at how Facebook friends

are affected by their geographic location in the United States. Based on the data of friendship relationships between pairs of anonymous Facebook users in April 2016, a map depicting the index of connectivity by area is created in this study. The study's findings show that where you live still matters when it comes to making friends and connecting with others.

The transition in the urban order is very obvious through the ways urban residential spaces are created and subsequent human behavior and cognition at this scale. In this light, the concerns of what effects housing has on human behavior and what characteristics of the physical environment at residential scale are significant in bringing about the desired changes became critical (Lee, 1973). As a result, systematic observation studies are required to investigate the relationship between the physical environment and human behavior within the scope of residential environment, in order to assess these new types of housing and to draw accurate generalizations for the future.

In this context, 'territoriality,' which provides both a 'insiders' perspective and the display of 'structural' characteristics of place, is an important spatial behavior both for understanding and regulating the dynamics of human-environment relations, and it emerges as a critical tool for assessing residential environments. In general, territoriality refers to the control of the environment by people or small groups in order to regulate social interactions, which fosters place attachment, place identity, sense of security, and stimulation for both the person and the community. Environmental psychologists define territoriality as "a combination of behaviors and cognitions that an individual or group exhibits depending on perceived ownership of

physical place" (Bell et al., 1990:256).

Emotional attachment and familiarity with the territory, as well as more abstract kinds of control over space through monetary, legal, and institutional authority, can all contribute to a sense of territoriality (Madanipour, 2003). Human territorial appropriation is defined by Lefebvre (cited in Castell, 2010:5) as *"urban dwellers' resistance to the power elites' faceless rule of urban spaces, it is when people claim their right to the city and construct places out of abstract spaces."* Territorial appropriation can be viewed in this light as a way of constructing common spaces out of abstract space, but it can also pose a threat to publicness if one group's appropriation excludes others from that place (Castell, 2010).

Human territoriality is a dynamic concept, and it transforms or manifests differently in different spatial and temporal levels. Furthermore, the characteristic of physical environment has considerable impact on human territorial behavior and cognition. Human territoriality and territorial cognition in relation to physical environment (gated and non-gated urban physical lay outs) will be investigated in the present study.

Problem definition: Rationale for the focus of home environments.

The present research aims to explore territoriality within gated and non-gated home environments of Lahore, Pakistan. Lahore, Pakistan's second largest city with a rich historical and cultural heritage, is a center of housing activity in the country. The development and spread of gated neighborhoods in Lahore have become a part of new housing schemes, particularly for people returning to Pakistan from abroad, as well as for people living in congested areas of the city who want improved physical environments, privacy, and security because of the city's rising theft and crime rates.

Lahore has more than 40 gated communities and few more gated housing projects are under construction. A survey conducted by Rahman and Anis (2009) on gated communities of Lahore revealed the popularity and growth of gated neighborhood on urban landscape of Lahore with no sign of decline in its growth. The survey also revealed the reasons people moved to these gated neighborhoods which were Improved living and better social environment, security, aesthetics (better physical design and planned environment) and closeness to job and relatives. Most of the respondents in this survey expressed their satisfaction over security measures taken by their respective gated communities' management. Another interesting finding of this survey was that residents not only expressed their likeness towards gated living, but they also expressed their preferences to move to a better maintained gated community if they find any.

Contrary to above survey, Low describes life inside the urban fortresses of USA in her informative book "Behinds the Gates." she presents an inside picture of gated communities to help understand why individuals escape to these enclaves after years of research and interviews with families in Long Islands, New York, and San Antonio, Texas. She found that the Parents with children, young married couples, "empty nesters," and retirees move to these communities to recapture the close-knit, picket-fenced neighborhoods of their childhood, as well as their secret worry of a more ethnically diversified America led them to these communities. Ironically, she determined that "gated communities are no safer than other suburbs, and many who relocate there are discouraged by the community's insularity and stringent restrictions" (Low, 2004).

The above-mentioned contrast was felt by the author herself and became the primary motivator for designing this dissertation. It is important to mention here that the author is a long-term resident of Lahore and during her course of life in the city she got the opportunity to live in both gated and non-gated neighborhood of Lahore. The author not only saw the city expanding over the years but also experienced different residential living environments offered by the city. The rapid growth of urban housing at the outskirts of the city in last two decades was intriguing (Farhat, Waseem, Khan & Baig, 2018) to witness as a resident of the city and it was interesting to notice how quickly these gated communities got popularity and people started moving into these communities (see figure. 1 below that shows the growth of urban area from 2000 to 2015). It is important to mention here that author's own experience of living in gated neighborhood incited curiosity in her about human-environment relationship. The author moved into a gated neighborhood from a non-gated neighborhood which was only 10 minutes' drive away from each other but the living experience in two neighborhoods was completely opposite. For example, in non-gated neighborhood, despite living there for 8 years the street and sidewalks adjacent to the home was never perceived as secure hence, it was never used to park the car or to go for a walk. On the other hand, in gated neighborhood the author experienced the extension of home area (street and block became useable), and it was routine for her as well as other residents to go for walk in the street at any time and to park the car in the street without any fear of it being stolen. It is important to mention here that the author's gated community was not the most secure and high-end gated neighborhood available in Lahore and was not included in the present study, but the

gated living invoked her curiosity and became the personal motivator for the designing and the execution of the present dissertation.

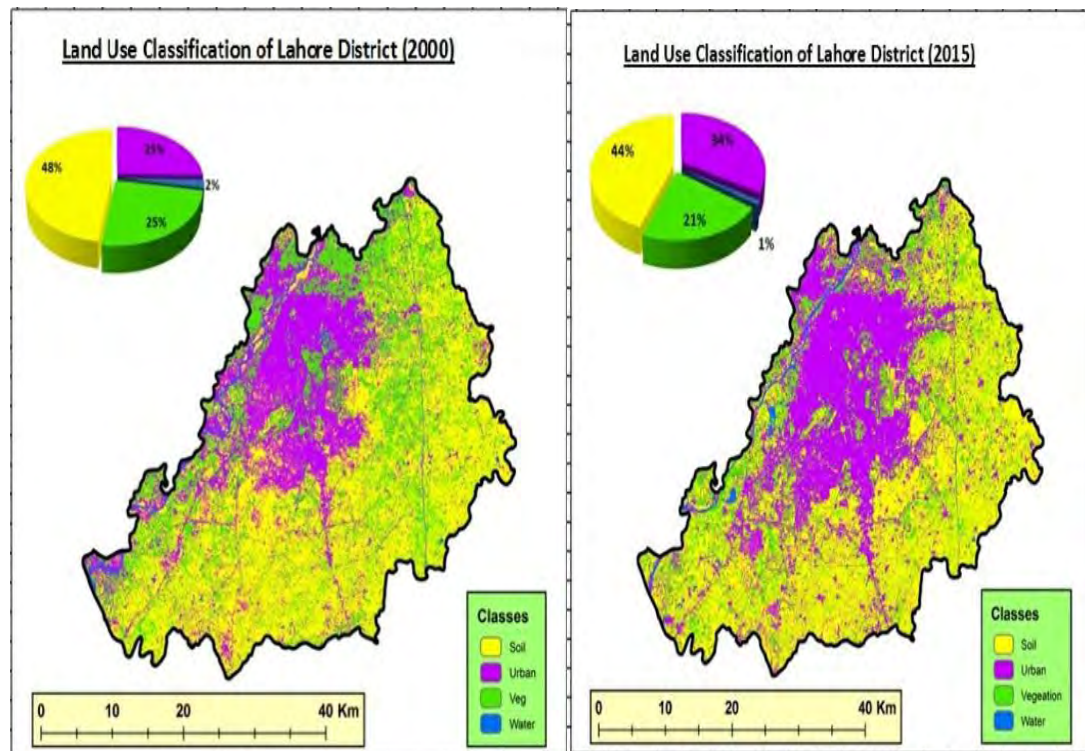


Figure. 1. Land use and urban growth of Lahore from 2000 to 2015 (Farhat, Waseem, Khan & Baig, 2018).

Physical Environment (Gated/Non-Gated Communities) and Territoriality. Built environment refers to the portion of the physical environment that is attributable to human effort. The built environment includes tools, structures, buildings, and technologies of various sorts designed and built by humans to create comfort and controllability and to extend their abilities to meet goals. The built environment is produced by human behavior, and what humans built has a great effect on human behavior (Hutchison, 2015). The city and its residential landscapes are not mere “bricks and mortars”, but spaces encoded with multiple social-political meanings and cultural significations. As Hayden (2002) notes, housing form carries many aesthetic, social and economic meanings that have profound influences on the

wellbeing of urban life and the community. Blakely and Snyder (1999) consider gated communities as manifesting several social tensions ~~between~~ *exclusionary aspirations rooted in fear and protection of privilege and the values of civic responsibility*; between the trend toward privatization of public services and the ideals of the public good and general welfare; and between the *need for personal and community control of the environment and the dangers of making outsiders of fellow citizens*” (Blakely & Snyder, 1999).

For their harshest critics, gated communities have often been diagnosed as an ~~urban pathology~~” (Davies, 1990) that is associated with destructive forms of ~~splintering urbanism~~” ; and other detrimental social impacts such as: the excessive encroachment of private property on public spaces; the undermining of traditional forms of citizenship bonding and civic trust; the exacerbation of social-spatial polarization and urban inequality and, ultimately, the disintegration and eventual destruction of the society at large and meaningful public life (Glasze et al., 2006; Low, 2003; Webster et al., 2002; Caldeira, 2001; Sennett, 1992).

In the United State alone, it has been estimated that the number of people living in gated communities has increased from four million in 1995, to eight million in 1997 and to sixteen million in 1998 (Low, 2003). However, the rise of gated enclaves is by no means an ~~American~~” phenomenon as such new urban housing form can also be found in nearly every major city in the world and may be the result of somewhat different local context and factors. For example, Gated enclaves in South Africa are inhabited not only by the rich but also by people from varied income groups and ethnic backgrounds. In Lebanon, gated communities first emerged during the civil war and in Saudi Arabia, gated compounds provide families with a sense of

privacy and identity but also to contain expatriate (Western) cultures in the predominantly Muslim country.

Fear of crime and police brutality further spurred the sprawl of gated enclaves in Latin America, while suburban gated complexes in the Mediterranean coast of Western Europe (Madrid, Lisbon and France) often serve as holiday homes for wealthy elites (Coy & Pohler, 2002; Jurgens & Gnad, 2002; Caldeira, 2001). More commonly, the rise of contemporary gated communities has been interpreted as a physical manifestation of the "global city-dual city" hypothesis (Webster et al., 2002). Gated communities have also been shaped by (and in turn shapes) the changing tastes and lifestyles of upper and middle-class residents who see gated living as offering promises of the good life. In this conception, individual/household preferences, changing lifestyle aspirations and security concerns are seen as important factors that account for the popular appeal of gated communities. For example, in Maxwell's (2004) analysis on on-line advertisements of gated communities in Canada, several social and lifestyle factors such as security, friendliness, social homogeneity, convenience, active lifestyle, privacy and exclusivity have been emphasized.

These marketing discourses idealize and commodity place as buyers are led to believe that their lives might just be a little more like the fantasy promised in the marketing brochures if they purchase a home in a particular gated development. The global diffusion of American "popular culture" and images of the "suburban dream home" have also been linked to changing consumer preferences (Wu, 2004 & Fraser, 2000). Often emphasized in these studies are the roles of "place imagineers" and "place entrepreneurs" (property developers, architects, and design professionals) in constructing and marketing gated communities as embodying various "utopian" and

“Edenic” visions of a perfect living environment – a highly controlled and manipulated space that is free from the dangers and unpleasantness of the “outside” world. Within these purported utopian landscapes, the “New Urbanist” paradigm holds sway as developers and planners opportunistically adopt various “neotraditional” neighborhood designs and “eco-friendly” environmental rhetoric to appeal to a niche-market of “lifestyle-conscious” housing consumers (Till, 2001; McCann, 1995).

In this way, aspiring upper and middle-class homebuyers may attempt to establish for themselves their own “habitus” by which they can be identified and with which they can identify (McCann, 1995). Yet, no matter what strategies of “enchantment” are being used in the advertising and selling of gated communities, at the core in the production and consumption of gated communities is the notion of territoriality and its control of space. Studies often pay scant attention to how territoriality operates in the “mesoscale” context, such as in an urban neighborhood or in a less formalized everyday context (Peleman, 2003). More fundamentally, the literature on territoriality also often overlooks the role of culture in the territorial organization of spaces and actions. In gated communities, territoriality is clearly manifested in the formal or “hard” territorial tactics such as the setting up of defensive physical structures (walls, gates, fences, etc.), surveillance and policing of boundaries, “turf guarding” actions by homeowner’s associations, etc.

By setting up territorial boundaries through the explicit zoning of space and further communicating and enforcing territorial exclusivity by constructing spatial markers and restricting access, gated communities are territorial entities par excellence. In addition, gated communities also manifest distinct characteristics of

modern territoriality through its classification of space and objects into abstract grids that conceptually separate the “spatial container” from the “spatially contained.” In the zoning of gated communities, the boundaries and perimeters of the enclaves determine the territorial extent of the spatial container. Once these spatial boundaries are fixed, the interior of the enclave is literally emptied out of its content and refilled with new residential communities, thereby obliterating any traces of what had existed before in these spaces. Territoriality also operates at a more subtle and ideological level as people actively mobilize different cultural resources and tools (values, symbols, rhetoric of the good life, etc.) to lay claim to their private properties and carve out their own exclusive spaces.

Territoriality operates through a mixture of coercive strategies as well as hegemonic consent through engineering wide-spread social acceptance of spatial classification (for example, “my place” versus “yours”) as natural and taken-for-granted. Gated communities are known by a variety of names in developing countries, including suburban enclave, urban fortress, fort, housing society, and town. Boundary walls or fences, gates, and security systems are frequent, with a layout that avoids through roads and entry of “irrelevant persons,” resulting in a lack of sense of community. Caldeira (2000) referred to such wealthy communities in Sao Paulo as “walled enclaves,” which provided a range of civic amenities as well as the appropriate security arrangements despite their social isolation. In contrast to the sense of community in gated residential areas, Sakip et al. (2015) found that the sense of community in non-gated residential regions of Malaysia was greater. It was determined by the length of time residents had lived in the region and the presence of positive community interactions that enhance a sense of belonging and sharing in a

neighborhood. Controlled access to residential neighborhoods with entrance canopy, good quality street lighting, landscaping, hedges, and massive wooden pillars, according to certain authors, can produce a feeling of place within the community and reduce crime rates (Davies & McAllister 2004).

Linking and defining Gating and territoriality for the present study

Rapid urbanization has resulted in a severe housing shortage, particularly in Pakistan's main cities, over the last two decades (Tariq et al. 2018). Housing has become expensive for most Pakistanis due to a lack of supply and a massive price increase (Nadeem et al., 2013). The government's planning and housing bureaus have been unable to meet the country's housing needs. As a result, the private sector has stepped in to create housing plans in a variety of locations outside cities (Nadeem et al. 2013). Lahore is Pakistan's second-largest metropolis and the provincial capital of Punjab. It has a rich cultural and historical basis, and as a result, housing business is increasing exponentially (Rahman and Anis 2009). There were around 40 gated housing developments in Lahore, according to Rahman and Anis (2009). Since most housing schemes developed by private developers and co-operative organizations include a boundary wall and gates, this figure has doubled.

People who live in non-gated communities, which are mostly developed by government entities, have built gates/barriers in through streets to prevent crime and unwanted social interaction.

Keeping in mind the literature and general observation of gated communities it is safe to assume that gated residential communities contain more territorial attributes than non-gated residential communities. For the present study two notions are

introduced and gated communities are assumed as *‘Territorially rich home environment’* and non-gated communities are *‘territorially lacked home environment.’*

Furthermore, For the present dissertation, gated communities are defined as:

‘a housing scheme/residential neighborhood within a city with boundary walls, authorized access through gates with check points at the entrance, and security measures such as CCTV cameras and enough street lighting in the area’ in Lahore, Pakistan.

Non-gated community, on the other hand, is defined as:

‘a housing scheme or an old established residential area within a city without boundary walls or gates, allowing general traffic to pass through, and open access to general public.’

Rationale, Objectives, and research questions for the present Study

The era of globalization and modernization is affecting almost all aspects of human life. The spatial structure of cities across the globe has been changed dramatically in last few decades. Social scientist has conducted considerable amount of research to understand the new spatio-physical arrangement and its impacts on people and society. On the other hand, environmental scientists and environmental psychologists have paid attention to person-environment relationship. In person-environment context psychologists have paid more attention to social environment and the construct of physical environment has been ignored (Hutchison, 2015; Nagar, 2006). The present research will investigate the two physical layouts (gated and non-gated home spaces) and its impact on *‘territorially related’* understanding of residents. Spatial behaviors that occur in physical environment e.g., personal space, territoriality, privacy and crowding have been researched since 1970’s under the

umbrella of environmental psychology. As in the present research we are interested in exploring territoriality and environmental cognition of residents living in gated and non-gated home spaces. Some prominent features in the literature of territoriality have been noticed which are important to discuss here.

First, majority of literature on human territoriality focuses on the physical markers or demarcation of territory but scholars have argued that physical markers alone are insufficient to explain the phenomenon of territoriality in humans (Negar, 2006; Cassidy, 1997). Second, researchers heavily rely on physical markers leading to a great number of research in finding relationships between physical markers and crime in a certain territory. Till the date, majority of research on human territoriality has been conducted to explain the relationship between territorial physical markers and crime rate (Bonnes & Secchiaroli, 1995). Furthermore, within the domain of psychology the physical markers are investigated on a micro level and in the present research it will be attempted to explore physical markers that are deployed for the collective benefit of a group (in case of gated community).

Third, among spatial behaviors territoriality is the one that is still evolving. As the literature on human territoriality grows, scholars keep on adding different aspects in its definition. Demarcation, personalization, and ownership are the constructs that are commonly associated with territoriality. Brown (2009) after conducting a number of research studies on territoriality in organizations suggested in one of his recent articles that the phenomenon of human territoriality needs further exploration. The multidimensional nature of 'territoriality' requires investigation of the construct within different physical layouts (gated and non-gated for present research) and on different scales (micro and meso). Most recently Graham, Gosling and Travis (2015)

wrote an article on the need of research on residential home environments and indicated that the construct of territory and territoriality is not only under researched but under theorized as well. Territoriality is the only spatial behavior that occurs on both individual and small group level (Taylor, 1988) and present research will attempt to fill the gap by investigating territoriality on meso level and within small group instead of individual level on micro scale.

In reference to territoriality, scholars have found that socio-cultural factors play an important role in territorial functioning. Abdullah et al (2018) in cross cultural validation of territorial construct found that marking behaviors and territorial attitudes differ in different cultures and societies. The present study will explore the territoriality in our cultural and spatial context. In Pakistan, the spatio-physical structure of almost all big cities has been transformed. A great number of citizens have been shifted from congested to more secure and gated residential areas. This new spatial arrangement has divided city into two major clusters: gated residential areas and non-gated residential areas. As gated communities are considered the best and most prominent manifestation of modern human territoriality, present study intends to explore it in this context.

The data for the present study was collected from gated, non-gated areas of Lahore. Unlike Karachi and Islamabad, the flat system has never been popular in Lahore. People prefer to buy and own separate independent houses, as a result the city is expanding day by day. Dozens of housing schemes have been introduced in last two decades and a great number of people are moving to these communities in search of better lifestyle and security. It is the need of time to explore the impacts of this new physical environment and how it's affecting the people living in it. A survey

conducted by Rahmaan and Anis (2009) in Lahore revealed that 26 % of the families living in gated communities belong to high class, 49 % from higher middle, 18 % from middle, and 7 % belong to lower middle-income group. They also found that majority 38% living in gated communities is employees of private organizations, 23% belongs to army, 21 % are businessmen, and 16 % are doctors and professionals. Only 4 % are landlords who usually own farmhouses and big villas. The major reasons of people's mobility to gated communities are, search for better living and social environment, security concerns, better infrastructure and architectural design and other reasons like closeness to relatives and job. According to this survey 93% people showed their satisfaction with security measures and management of gated communities. An interesting finding of this survey was, people living in these communities expressed that they would move to another gated community if it offers better maintained gated and social environment.

So, the rapid growth of gated communities and the migration of large amount of population into these communities have made it compulsory to conduct in studies to understand this new phenomenon. Considerable amount of literature is available that make us aware about the impacts on overall community and the role these gated communities are playing in social segregation. But our aim is to explore territoriality in two different physical layouts of urban residential environment (gated and non-gated). Territorial behavior differs in different spatial segments of society. For example, people behave differently in public and private places. Territorial behaviors provide us with the sense of identity and help us to relate to the place we are living in. it helps people to anticipate whom they are going to encounter in a particular territory and what would be the status of people visiting a particular territory. By occupying

and living in a particular territory, people tend to establish different territorial cognitions and perception about the territory which leads to different territorial behaviors.

In the search of literature, very few indigenous researches are available on the present topic that addresses the issue of human territoriality and its associated socio-psychological constructs (google search, HEC virtual library, GCU, NIP and PU libraries). Rhode (2000) in his research found that territorial behaviors are widespread in both animals and humans but are neglected in textbooks of human behavior and mental problems. It is the need of time to explore the phenomenon of territorial cognitions and behavior, how they are formed and how these cognitions and behaviors are affecting people on collective and individual level. In-depth Exploration of territoriality in different spatial segments (gated and non-gated) of urban structure provided us with more comprehensive picture of the phenomena in hand.

Objectives

The present research has three main goals:

1. To explore the territorial meanings that inhabitants attach to their gated and non-gated home environments.
2. To explore the sources of territorial meanings and the means through which residents derive these meanings.
3. To investigate the significance of environmental variables, particularly physical spaces, in developing and changing the territorial meanings attributed to gated and non-gated home environments.

Research Questions

1. What are the territorial meanings that gated and non-gated developments have for individual residents? Specifically,
 - a) What are residents' perceptions of their ability to manage and affect their living environment, as well as their perspectives toward who should and should not be permitted into their gated communities?
 - b) How do inhabitants perceive Gated communities in terms of a sense of "at-homeness" and other socio-spatial factors?
2. How does each individual resident define and substantiate his or her territorial understandings as a situated person in a related situational environment?
 - a) What are the factors, conditions, or processes that are directly and immediately related to individual residents' residential territorial meanings?
 - b) What are the factors, conditions, or processes that contribute to individual residents' residential territorial meanings in an indirect manner?
 - c) What are the likely overall patterns in which different spatial, social, personal, and behavioral elements influence residential territoriality?
3. What role does physical space play in residents' territorial understandings? Specifically:
 - a) What is the best way to define the overall importance of physical space?
 - b) What specific spatial characteristics are present in gated and non-gated physical layouts and how do they affect territorial meanings?

- c) To what extent and in what ways could different urban home environments influence the meanings of residential territoriality for its occupants?

Focus, Proposed method and conceptual development of the thesis

The main aim of the present study is to explore human territoriality within the context of gated and non-gated home environments. To attain this aim, the literature on human territoriality specifically from the field of environmental psychology is thoroughly reviewed and a broader definition of human territoriality is extracted. The literature on human territoriality revealed that the phenomenon of human territoriality is under researched and under theorized within the field of psychology and researchers have been indicating the need of investigating the phenomenon on different socio-spatial scales and cultural settings (Taylor, 1988; Graham, Gosling & Travis, 2015; Meagher, 2019). A thorough literature review provided understanding and evolution of the construct human territoriality within the field of environmental psychology, and it also provided the necessary guidelines and identified the theoretical and methodological gaps for the present study.

The literature on human territoriality provided three major understandings: The physical environment (where spatial behaviors including territoriality occurs) has been overshadowed by the heavy focus of researchers on social environment in the field of psychology. Hence, the construct of physical environment has been treated as a passive background stimulus.

Human territoriality is a spatial behavior that occurs in different socio-spatial scales and social, cultural, and temporal differences impact on human territoriality.

This endorses the need of exploring the phenomenon in different social, cultural, and physical settings.

The phenomenon of human territoriality within residential spaces is specifically under researched and scholars have been indicating the need of exploring residential territories to develop better understanding of the phenomenon. In the literature (Altman, 1975) home is considered a primary territory that contains maximum psychological significance (source of self-esteem and self-identity). Taylor and Brower (1985) wrote an article –*Home and near home territories*” and proposed that territories adjacent to home contain psychological significance too. Keeping this in mind, the gated communities are defined as *‘territorially rich home environment’* which will contain more psychological importance for its occupants than non-gated communities which are defined as *‘territorially lacked home environment’*.

The adoption of a broader definition of human territoriality allowed the exploration of human territoriality at residential scale through the lens of environmental psychology. In this context, residents territorial understanding at the meso scale (near home territory, home vicinity) within different spatial layouts (gated and non-gated) is explored.

Furthermore, the ecological framework (situativity theory) is used to investigate territorial cognition in the present study. Ecological framework gives importance to the context (situation) in which any psychological activity or behavior occurs. This approach believes in the mutuality of perceiving agent (residents) and the environment or situation (gated non-gated communities), and this perceiver-environment interaction is the basis for environmental cognition (territorial cognition or territorial understanding). Since situativity approach believes in the mutuality of

person- environment duo and both person and environment are given equal importance, the present study adopted this approach and investigated person (residents) and environment (gated and non-gated communities) as two equal yet mutual entities which were responsible for territorial cognition (territorial understanding and territorial sense of residents) (see detail in territorial cognition section of this chapter).

This approach allowed the thorough investigation of physical environment (gated and non-gated residential space) and helped in exploring the physical attributes of two residential home environments and how they impact the residents territorial understanding.

To explore human territoriality within gated and non-gated home environments the qualitative approach as an overarching methodology is employed. Qualitative research is interpretive research in which investigation of the phenomenon of interest is done through intensive and sustained interaction with participants and research setting (Locke et al., 2007). Qualitative approach allows the investigator to establish claims based on constructivist perspective (i.e., socially, and historically constructed meanings or multiple interpretation of individual experiences with the intent of developing a theory or emerging pattern) and participatory perspective (i.e., socio-political, cultural, and physical contexts) or both (Creswell, 2003). For the present study qualitative inquiry is used to gain in-depth understanding of the phenomenon of territoriality within residential home environments.

Grounded theory is one of the finest strategies of qualitative approach which is applied in the present research. It is used as the overarching methodology as well as method for analyzing the data. it is preferred in grounded theory that the researcher

enters the research setting with fewer predefined opinions or notions about the phenomenon of interest. This strategy facilitates the investigator in developing theory or establishing pattern which emerges from the data (Groat & Wang, 2002). Grounded theory is usually used as a discovery-oriented approach to either develop a theory (that emerges from the data) or for the expansion of existing theory or model.

During the initial stage of investigation while using grounded theory, it is advised to avoid any preconceived theoretical notions and hypothesis. This strategy enables the investigator to explore the phenomenon of interest with more freedom. Hence, the resulting theory or patterns will be emergent or embedded in the data. grounded theory encourages progressive (data driven) direction rather than a pre-determined or fixed. It requires both rigorous and flexible approach to collect or analyze the data (Strauss & Corbin, 1998).

For the present study grounded theory approach is used and the construct of territoriality and territorial cognitions are broadly defined with minimal theoretical conceptualizations (see last section of this chapter: guiding theoretical conceptualization for the present study). It has been discussed above (rationale section) that the construct of human territoriality is not only under theorized but with reference to residential environments the phenomenon is rarely studied especially with the lens of psychology. In the context of Pakistan, during my search for the present project I could not find any research that addressed the phenomena of human territoriality within the field of psychology (google search, HEC virtual library, GCU, NIP and PU libraries). Few research that were found and reported were from either geography or urban planning departments and were primarily addressing the issues of land use or urban design. Keeping in mind all the above issues, the present project

was designed in an exploratory nature and an attempt was made to conduct research which could provide an in-depth understanding of the construct of human territoriality within the context of residential environments of Lahore, Pakistan. Lastly, the grounded theory approach allowed the in-depth exploration and facilitated in reporting the findings which were mostly embedded in the data.

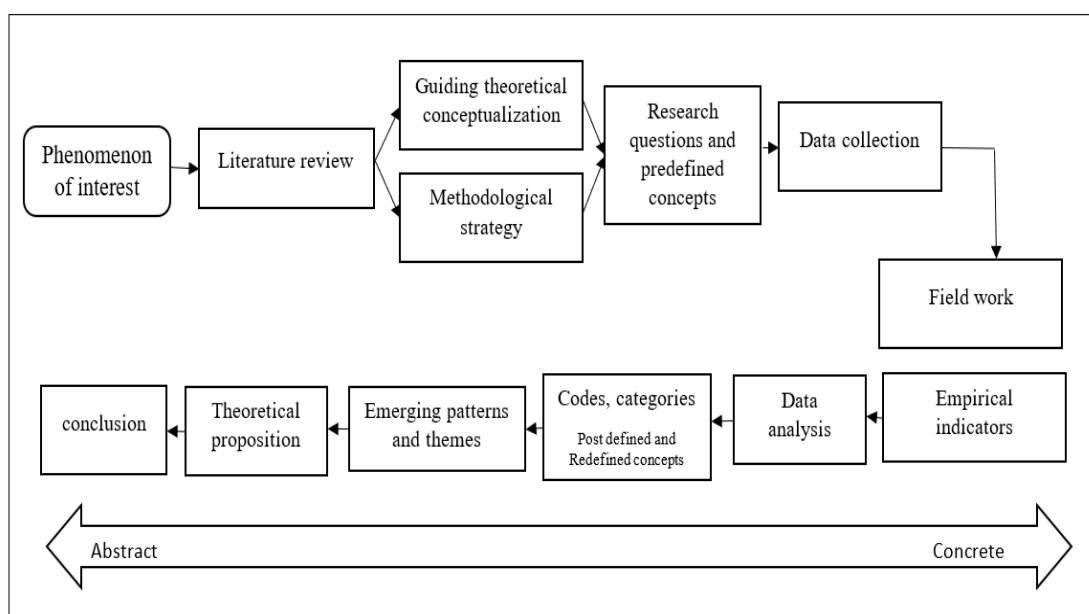


Figure. 2 conceptual development of the present thesis.

In the following section the detailed literature review of territoriality and territorial cognition is presented. At the end of this chapter the guiding theoretical concepts used in the present dissertation are explained.

Territoriality: A spatial behavior

Territorial behavior is considered as one of the central concepts of environment and behavior. Residential satisfaction, territorial behavior, and local ties have been identified as measures of residents' place attachment and sense of community (Giuliani, 1991). In residential settings, territorial behavior can be seen in

the everyday behaviors of residents, which therefore, puts human territorial behavior within sociological analysis of urban life. The role of territorial behaviors' is to provide a stable social organization within a resident's society along with the boundary-regulate actions (Edney, 1975), further helping residents to define sense of belongingness within residential environment.

Territorial behavior may play key roles in maintaining ongoing behavior patterns in particular settings while territorial behavior of residents indicating resident's attachment and satisfaction with their residential environment. Residents who do not exhibit territoriality therefore may not be as attached to and satisfied with their environment (Taylor, 1988). There has been extensive research related to human territory issue conducted by several behavioral scientists. Altman (1975) summarized the research and suggested a Framework to describe human territory types. Many scientists use the term "territory" over a wide range of scales from macro level to small neighborhood space level and it has been suggested that differences in human territoriality usually depends on the scale of a specific site (Taylor, 1988).

Human territoriality impacts residents or be influenced by many factors within a specific site at small scale, such as residential exterior spaces close to each dwelling (Taylor, 1988). Moreover, significant relationship between residents' territorial behavior and their living environment was surfaced while investigating resident's territoriality phenomenon via learning cohesiveness pattern between physical living environment and resident's territorial behavior (Brown & Werner, 1985; Greenbaum, 1981; Brower, 1996). It led to the conclusion that a strong relationship exists between residents' territoriality and physical living environments, which extends to their sense of satisfaction, attachment, and sense of community. Cooper (1968) conducted a study

on public housing and found that territoriality was a significant design consideration and it had impact on resident's satisfaction towards their residential unit.

Territoriality is one of the spatial behaviors recognized in environmental psychology. The present section will introduce these spatial behaviors and human territoriality will be discussed in detail.

Spatial Behavior. Scholars from social and behavioral sciences have paid little attention to the reciprocal relationship between physical environment and its effects on human behavior. Quite recently, researchers have started exploring the dimension of physical environment and its impact on human behavior, whereas social environment has been studied widely and the impacts of social and cultural environment on human behavior have been studied widely (Hutchison, 2015). In recent years scholars have started paying attention to the striking findings about the relationship between human well-being and the physical environment (Gray, Coates, & Hetherington, 2013) which includes an ecological model, labelled as life model, which recognizes physical environment as a significant part of person-environment construct (Gitterman & Germain, 2008).

Types of spatial behavior. Within the physical environment, different spatial behaviors occur; privacy, personal space, crowding and territoriality. These spatial behaviors focus on the control that humans exercise over their physical environment (Gifford, 2007). Personal space and territorial behaviors are considered boundary regulating mechanisms that we use to gain greater control over our physical environment (Hutchison, 2015).

Privacy. Altman (1975) defines privacy as 'selective control of access to the self or to one's group'. Privacy may be linked to territorial functioning but once in a

territory, occupants enjoy other benefits in addition to desired privacy. Personal choice and personal characteristics play more important role in privacy while defining privacy mechanisms which leads to behavioral sequences applicable for increasing or decreasing contact with others. These are usually more generalizable and person specific rather than being place specific with reduced territorial behavior patterns. Personal space and territoriality both mechanisms are used to secure privacy (Hutchison, 2015).

Personal space and territoriality. Although the concept of personal space and territoriality are interrelated, but certain conceptual and methodological distinctions between these concepts have been noted by many scholars (Altman, 1975; Sommer, 1969).

Sommer (1969) described the following differences between personal space and territoriality: personal space is portable whereas territory is relatively stable and stationary.

1. The boundaries of personal space are invisible whereas the boundaries of territory are not.
2. Person is the central element in personal space whereas it's not the necessary condition in territoriality.
3. Discomfort and withdrawal behavior is common in people when their personal space is invaded. In contrast, invasion of someone's territory leads to verbal threats and fights.

Crowding. Crowding is a subjective feeling of having too many people around. Crowding is not always correlated with density (ratio of people per unit area of a space); the feeling of being crowded seems to be influenced by an interaction of

personal, social, cultural and physical factors. Unlike other spatial behaviors, it is more related to subjective feeling (Hutchison, 2015).

The present study focuses on the idea of territoriality in near home territories within the context of gated and non-gated communities which can be referred as community or group of homes build within a gated space or non-gated space respectively. They are surrounded by a wall which separates them from the rest of the city or urban setting. The idea behind such communities is to have a safe and secure environment which an individual or group of people inhabiting can exhibit control over. The main objective of this thesis is to explore the construct of human territoriality and territorial cognition within gated and non-gated home environments. This section introduces the idea of territoriality while explaining the historical and theoretical background of human territoriality, its types as classified by theorists along with highlighting the pertinent value of territoriality as a concept which encompasses the capacity to shape and influence attitudes and behaviors of human beings in an unseen yet powerful manner.

Territoriality: understanding human-environment relation

According to territoriality theories, almost all animal species, including humans, assert exclusive authority over physical space, both individually and as a group (Porteous, 1976). Nonetheless, territoriality, a fundamental behavioral system in all living organisms, including humans, emerges as a prominent mechanism for spatial regulation and thus social organization within shared space.

Control of space is required for spatial regulation, which depends on the capacity to protect space against unwanted access. However, the controlled space is territorial. As a result, the act of inhabitation, which is the occupation of a space and

the control of its entrances and exits, is fundamentally territorial. As a result, territorial organization of space is one of the most innate and historic human behaviors in relation to the built environment (Habraken, 2000). This section expands on theoretical discussions based on the concept of territoriality, which is a premise tool for both understanding and organizing human-environment relations.

History of territoriality

The construct of territoriality has diverse and dynamic roots and connotations attached to it. Different theoretical perspectives like ethological, behavioral, and evolutionary explain different dimension of territoriality. But the concept of territoriality can be defined as attaining exclusive control of an area by an individual or a group. Furthermore, direct, or indirect aggressive strategies are employed to gain control or to defend the area (Porteous, 1977).

Territoriality refers to individual or group behaviour and attitude patterns based on perceived, attempted, or actual control of a definable physical space, object, or idea as a result of habitual occupation, defense, personalization, and marking of that specific site (Gifford, 1997). In other words, territoriality is the act of claiming, identifying, and defending a specific physical territory (Hall, 1969; Brower, 1980). Territoriality is concerned with how people use and organize themselves within a space, as well as how they give meaning to their space (Farkisch et al., 2015). In a similar vein, Bell et al. (1990) defines human territoriality as a person's or a group's behavior and cognition patterns based on ownership over a physical space. Moreover, Gold (1981, cited in Hirschon and Gold 1982) proposes three major perspectives to reframe the concept of territoriality. Initially, territoriality serves as the foundation for daily life. Territoriality is both an expression of social order and the foundation for

daily activities. Second, territoriality is a mechanism for achieving specific goals such as regulating access to space, preventing crowding, and providing privacy. Third, territoriality is a mode of communication, a language used to express ownership and a source to display identity.

Furthermore, types of infringement over a territory include invasion, violation, or contamination. defense of a territory can be preventive, reactive, or through the use of social boundary mechanisms (Gifford, 1997). Territoriality, whether achieved through dominance, mutual consent, aggression, or administrative authority, determines which individuals have access to what areas of a physical location, and thus to what extent each individual's needs will be met in that setting (Proshansky et. al., 1970). As a result, territory is defined as an area claimed and used almost entirely by individuals and groups (Sell, 1983).

Significance of Territoriality

The functions of territoriality and their degree vary with respect to different species and while analyzing this pattern in humans, territoriality is far more complex and exists in diverse forms. Identity, security, and stimulation (Porteous, 1976) are the three main facilities which are provided by territoriality to the residents and out of these three benefits, stimulation can be acquired by defending and modifying the territory. Whereas territorial control within the territorial ensures privacy and security to the occupants. Consequently, *security is felt strongest at the center of a territory, whereas stimulation is strongest at the borders*' (Ardrey, 1966 cited in Edney, 1974:961). When a person owns a territory, he/she confirms his/her space, and the ownership provides a sense of satisfaction as well as enhances the identity of that person who ultimately leads towards group identity (Edney, 1976).

The concept of territoriality helps in maintaining social order and social roles, ultimately, benefiting human beings on personal and social level. In this way we can say that territoriality license efficient distribution of resources (Edney, 1976). On the similar note it can be established that allocation of these resources and their conservation is also controlled by territorial functioning (Tayler, 1988).

In the course of time, this has been witnessed that human beings displace from a territory encompassing less resources towards resources laden territory, evidently showing the desirability of human beings to acquire better resources. Thus, the value and functions of territory differ based on different resources available in it. There is a direct proportional relation between the density of human communities in a territory and the availability of resources. Greater the resources available in the territory, denser will be the human population in the region (Dyson-Hudson and Smith, 1978 cited in Bintliff, 1999). Various studies show that different communities have multiple interests, therefore, their living conditions change with respect to their needed resources. For instance, human beings belonging to hunting gatherers had to travel from their houses i.e., in the radius of 10 kilometer, whereas the sites for pastoral herders used to be in the radius of 7.5 kilometers from their houses. Similarly, the communities which live on farming have a territorial radius of about 5-kilometers in general (Bintliff, 1999).

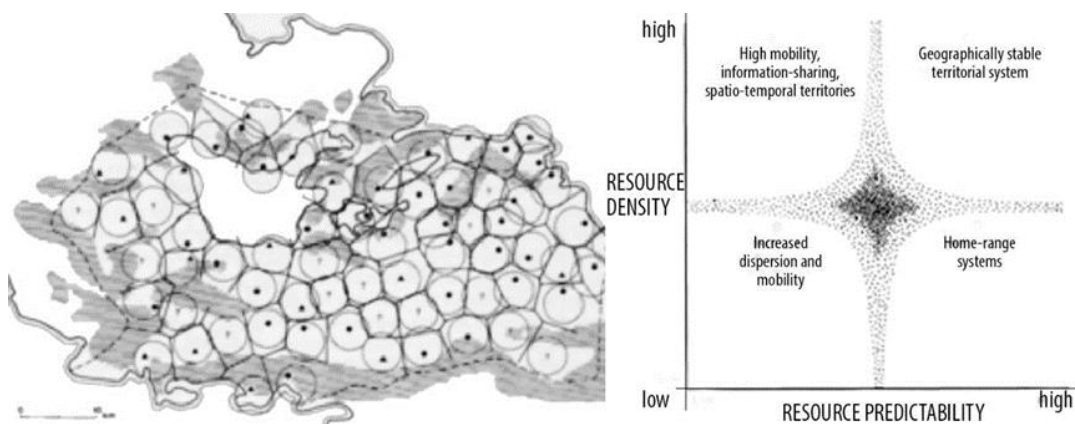


Figure 3. (On the left) Settlement territories in the classical era of Boeotia, Greece drawn based on the 2.5 km Radius pre-defined as the village-city subsistence territorial extent for that period (Bintliff, 1999, p.517). (On the right) Territorial systems according to resource allocation (Bintliff, 1999, p.510).

The pattern shown in the above figure (Figure. 3), infers that the settlement dynamics with the different of phases of the evolution of human communities give rise to shifts in modern territorial structure. The three major shifts are observed in this regard. Firstly, Penetration in a territory starts with the increase in number and supply forms. Secondly the impact of globalization in the form of global networks of commercial organizations can be seen on the local territorial control. A sense of previously claimed identity is being merged with the new patterns of modernization. Thirdly and finally, the material structures of sky-high buildings are disordering the array of supply forms and unfortunately, they are negating the sense of domestic scale territorial control (Habraken, 2000).

Moreover, territoriality gives us a chance of social interaction which eventually creates personal identity through the process of identification and knowledge accumulation. Geographical fixation also plays a major role in it while promoting a sense of competence among inhabitants, this kind of spatial familiarity is

similar to the 'home field' advantage in sports (Gifford, 1997). Consequently, social regulation as well as individual fulfilment goals are achieved unconsciously.

Small group territorial functioning is more beneficial and has more positive outcomes than larger mergers. These outcomes can be categorized as psychological (when activities at smaller scale will be controlled inside as well as outside the house then it will result in personal stress reduction), social-psychological (group identity and solidarity can be achieved very easily and a stronger bond can be established in a controlled environment), social-ecological (when people share one specific space their habitat can be controlled and people can relate to each other's problems and can solve them as a group) (Taylor, 1988).

Social interaction within a domestic shared space is linked with territorial behavior. People belonging to a single space develop a mechanism known as self-other boundary mechanism which defines the problems of people sharing a single space (Altman, 1975; Farkisch et al., 2015). This social regulation mechanism ensures less distraction caused by density of population which results in maximum comfort and privacy of a community (Proshansky et al., 1970). Therefore, it can be established that territorial functioning provides spatial separation that maintains discipline in multiple territories for various types of activities which results in diminishing social conflict and miscommunication (Altman, 1975).

Ownership ensures identity and thus acquisition of places and things define human beings and maintain their identity and while doing so, people evaluate their self-identity which becomes transferrable with other people in an automatic manner. Such things not only fulfill the biological needs of human beings but also social needs (things like beds, chairs etc.) are also acquired while preserving the sense of personal

identity and social identity (Altman and Haythorn cited in Proshansky et. al., 1970). A well-defined sense of self can be achieved by having a well-found sense of space and well-established personal territories (Sell, 1983). Similarly, certain social problems can be solved by territorial functioning combined with similar other tools (Taylor, 1988). In the similar fashion, sharing a similar space result in the lessening of crime rate in a particular territory (Newman, 1972). The reason of such a claim is that when a well-defined group would be sharing a specific place then information about each other on personal level is easier to acquire and retrieve which involuntarily increases the level of surveillance on personal level as well.

Social cohesiveness and attachment to the territory elevates an occupant's sense of accomplishment over social and personal dimensions, since issues associated with maintain a large-scale community, for instance, disorganization of resources etc. reduces in an automatic manner (Ono, 2001). Conclusively, the major functions provided by territoriality according to Bell et.al (1990) are reduction of environmental load (by providing a sense of order which decreases complexity), decrease of personal stress (stimulus can be controlled and personal identity can be secured by achieving desired level of privacy within a territory) while providing an opportunity to maintain a healthy balanced life, reduction in aggressive defense (territoriality can reduce aggressive defense strategies by offering place identity) territorial control (territoriality by offering territorial control provide occupants the chance to steer desired or chosen behavior).

Human territoriality

Ethological studies are where we can find the roots of territoriality (Hall, 1969) and it's true that intrinsic nature of territoriality is considered important for the

survival of many species but the territoriality in humans is far more complex due to the diverse impacts of evolving human civilization and diverse culture range (Madanipour, 2003). Similarly, the modification of territorial behaviors in humans can not solely be attributed to hereditary. The forces of culture and learning play an important role as well and due to these forces, the territoriality vary across different socio-cultural context (Gold, 1982). Hence, it is important that territorial studies should consider different spatial-temporal, ecological, cultural, behavioral, and social aspects while investigating the construct (Sell, 1983).

Taylor (1988) claimed that territoriality operates well in small groups and territorial systems within a group rely on cooperation and not on competition. As the human civilization evolved people started living in small villages and labour divisions the function of territory from a 'resource unit' shifted to 'functional units'. According to Gold (1982:50), *'anthropologists overemphasized the role of kinship over territoriality for the preindustrial societies as the major principle of social organization'*. Although, territoriality was obviously facilitating the within and between group relationships in preindustrial societies. In that period, few groups relied on aggression to defend their territories while others resort to lenient strategies to exert territorial control; here cultural norms played important role and groups shared their territorial resources (economic trade) (Gold, 1982).

Nature-nurture debate has been prominent in defining territoriality and territorial behaviors. Nature based theories emphasize on the instinctive nature and explains human territoriality as a predisposition which enables humans to regulate, control and exploit resources of the space they occupy. This notion is strongly endorsed by etiological studies. The second approach without denying the instinctive

base, view human territoriality as a 'strategic approach' to control a space and resources within it and focuses more on socio-cultural aspects (Porteous, 1977). It is safe to say that territoriality in animals serve as a survival mechanism while in humans it serves as a tool of spatial organization and to maintain spatial order on different scales (Bell et. al., 1990).

Human territoriality serves far more complex social needs than survival instincts, including identity and self-actualization processes, as well as purely symbolic purposes such as conveying status. Human territoriality is also less consistent and more adaptable, as it evolved gradually over time and is passed down through generations through the socialization process. Human territoriality entails claiming space through occupation, which can be permanent or temporary, as well as personalization and marking to convey this message through symbolic means (Hirschon & Gold,1982).

Furthermore, the territorial behaviors are more diversified in humans as they tend to perceive, modify, and organize different territories differently (Anderson and Tindall, 1972). In humans' territorial behaviors and attitudes are more flexible yet complex due to the capacity of learning and social adaptation. Moreover, during a life span humans tend to associate with different territories which serve different purposes, and this eventually leads them to establish territorial bonds and territorial attitudes and behaviors. So, the dependency on single territory has shifted to multi-territory dependence, but the dependence on multiple territories has not decreased the importance of home-base territories. Hence, human territoriality cannot be solely attributed to innate ability, but it's a continuous process of identification with different places that form territoriality in humans (Sell, 1983).

Active defensive territorial strategies are mostly linked as a common territorial characteristic in both animal and human territoriality. Contrary to this, humans tend to resort to passive defense strategies like ‘lying claim’ on a place, access and exerting control over area are more common. Claiming an area can be communicated through putting up and controlling the boundaries or by putting up territorial markers or signs (Taylor, 1980).

Edney (1974) described some distinguishing features between human and animal territoriality which are: a) ability of learning has impacted human territoriality more than genetic factor, b) aggression is not the hallmark of human territoriality rather humans mostly rely on passive defensive strategies (except warfare), c) animals mostly spent their life time in a single territory while humans form multiple territorial associations over the course of their lives, d) animal territoriality serves a survival purpose of finding food or resources.

It is important to mention here that all humans embody a sense of territoriality, but other factors (personal, socio-cultural, and physical context) play an important role as well. Personal factors like age, gender, personality etc. socio-cultural factors include social class, resource distribution among different social groups and local cultural norms. Lastly, physical factors are those described by Newman (1972) in his defensible space theory which postulates that different physical layouts of territories impact territorial behaviors and territorial feelings (Gifford, 1997). Concussively, it is safe to say that the concept of territoriality comprises both behaviors and cognitive patterns linked to any place or territory (Gifford, 1997; Taylor, 1988).

Although, human territoriality is a complex phenomenon but Sell (1983) has identified six characteristics of human territoriality which are as follows:

Defining and marking territory: a clearly defined marking or boundary of a place turns it into territory. Although, territorial boundaries may change or overlap with time, but territory is a place whose boundaries are clearly marked or defined.

Defense and control: Territorial control can be maintained through exclusive use, dominance, marking, avoidance, and a variety of other mechanisms. Although aggressive defense is frequently mentioned in ethological studies as a control mechanism, animals only use it as a last resort. Furthermore, in normal situations, control of territory is more important in humans than overt defense. Aggressive defense is used only in deviant and criminal situations, such as burglary or war, when threats cannot be resolved by relying on social intercourse to maintain claim. To maintain control, humans rely on verbal and nonverbal communication (displays, rituals, manners, etc.) as well as marking behaviors. Control of the territory allows the occupant to organize the environment around his or her needs and goals, such as access to resources.

Territory and available resources: ownership or claim to a specific territory provides its occupants the opportunity to exploit the resources available within that territory. As the familiarity with a territory increases so does the responsibility towards the resources (conscious maintaining and conserving resources).

Territory and social relations: through territoriality social regulation and social relations are maintained within a territory. social recognition and social interaction are the two ways through which social relations are maintained. Social recognition is usually achieved through group identification (for example, association with religious or ethnic group or in case of urban environment belonging to a certain neighborhood can communicate social status). On the other hand, social interaction is used to

control group interaction by regulating integrity, dominance, and privacy. Individual territories serve to isolate the territory's occupant, whereas group territories serve to bind the occupants who share the same territory. The shape and attachment to territory are directly related to the type of social life that exists within that territory, and the size and allocation of territories are related to the social hierarchy.

Psychological Qualities: The territorial bond formed between the occupant and its territory because of familiarity and comfort or as a consequence of habitual and intensive use of the area provides certain psychological qualities. These qualities include reducing the complexity of the environment and thus easing decision-making processes with a sense of continuity and the ability to predict and control future events, optimal level of arousal, a sense of safety, the ability to perform habitual behaviors and routines, and behavioral freedom. The formation of a psychological bond also results in territorial defensive strategy and attachment.

Territoriality and self-identity: Territory fosters the development of self-identity, allowing the occupant to be recognized as an individual by others. Territoriality provides the necessary level of privacy, allowing the occupant to be alone and develop one's sense of self. As a result, a well-defined territory helps to support a well-defined ego. Territory, or the physical environment, also reinforces a person's self-image or the image that person wishes to project or develop on others. Territory can be defined in this context as a self-place system in which the intensity of association with the place helps define self-identity. Attachment to specific places is also influenced by the degree of relationship between a territory and one's sense of identity (Sell, 1983).

Moreover, human territoriality is a broad notion which encompasses both cognitive and behavioral patterns related to place (Gifford, 1997; Taylor, 1988). Many characteristics that are associated to human territoriality in literature are *geographical space, defense, marking of space, possession, ownership, exclusive use, personalization, control, and identity* (Edney, 1974: 962). Hence, the term human territoriality has many definitions and connotations attached to it and some of these connotations can be clustered as key concepts which are compiled in the table below;

Table. 1
Conceptualization/ definition and key concepts of human territoriality

Author	Conceptualization/definition	Key concepts		
Parr, 1965/1970	<i>territory is the space an individual or a member of a closed-knit group (family, gang etc.), in joint tenancy, claims as his or their own, and defend (Parr, 1965/1970:12).</i>	laying claim to an area	Defense	
Stea, 1965/1970	<i>territorial behavior is the desire both to possess and occupy portions of space is pervasive among man (Stea, 1965/1970:38).</i>	Possession and occupying space		
Brower, 1965	<i>a tendency on the part of organisms to establish boundaries around their physical confines, to lay claim to the space or territory within these boundaries, and to defend it against out- siders (Brower, 1965:9 cited in Edney, 1974:962).</i>	Laying claim	Defense	Defined Boundaries
Sommer, 1966	<i>territory is an area controlled by an individual, family, or other face-to-face collectivity. The emphasis is on physical possession, actual or potential, as well as defense (Sommer, 1966:61 cited in Edney, 1974:962).</i>	Possession	Defense	
Altman, 1968	<i>encompasses temporally durable, preventive, and reactive behaviors including perceptions, use, and defense of places, people, objects and ideas by means of verbal, self-marker and environmental prop behaviors in response to properties of the environment, and is geared to satisfying certain primary and secondary motivational states of individuals and groups (Altman, 1968:10 cited in Skaburkis, 1974:39).</i>		behaviors including perceptions, use and defense	over places, people, objects and ideas
Hall, 1969	<i>behavior by which an organism characteristically lays claim to an area and defends it against members of its own species (Hall, 1969:7).</i>	Laying claim	Defense	
Proshansky, Ittleson and Rivlin, 1970	<i>territoriality in humans is defined as achieving and exerting control over a particular segment of space (Proshansky, Ittleson, and Rivlin, 1970: 180).</i>	Control		Particular segment of space
Pastalan, 1970	<i>a territory is a delimited space which an individual or group uses and defends as an exclusive preserve. It involves psychological identification with the place, symbolized by attitudes of possessiveness and arrangements of objects in the area (Pastalan, 1970b: 4 cited in Edney, 1974:962).</i>	Exclusive use	Defense	Delimited space

Continued...

Table. 1
Conceptualization/ definition and key concepts of human territoriality

Author	Conceptualization/definition	Key concepts		
Edney, 1974	<i>set of behaviors that a person (or persons) displays in relation to a physical environment that he terms 'his', and that he (or he with others) uses more or less exclusively over time (Edney, 1974:959).</i>	Set of behaviors	Exclusive use	
Altman, 1975	<i>the term territory is mainly discussed with reference to a specific place or geographical area which can be the domain of individuals or groups, the term conveys the idea of ownership, involve personalization, controlling of boundaries, and concerns about intrusion and defense (Altman, 1975:105-6).</i>	Ownership	Personalization, control of boundaries, concerns about intrusion and defense	specific place or geographical area
Brower, 1980	<i>the act of laying claim to a geographic area, marking it for identification and defending it when necessary (Brower, 1980:179- 80).</i>	Laying claim	Defense	Marking for identification
Hirschon and Gold, 1982	<i>the process and mechanisms by which people establish, maintain and defend territories - is best regarded as an analogy, when applied to human behavior, constituting a culturally derived and learned solution to particular human problems. In particular, territoriality is seen as part of man's ability to endow space with symbolic meaning (Hirschon and Gold, 1982: 63).</i>	culturally derived and learned	establishment, maintenance and defense of territories	endow space with symbolic meaning

Continued...

Table. 1
Conceptualization/ definition and key concepts of human territoriality

Author	Conceptualization/definition	Key concepts		
Gold, 1982	<i>Many activities are organized on a territorial basis, and a significant proportion of human behavior is directed, explicitly or implicitly, towards partitioning space and towards maintaining the territories and boundaries so formed...Territory implies a defended and bounded space with connotations of attachment and exclusiveness. Hence, territoriality refers to the processes and mechanisms by which people establish, maintain and defend territories... Mammal territoriality encompass the network of paths and places to visit and use; they may overlap while the contradiction is resolved through temporal and spatial orders (Gold, 1982:44-46).</i>	attachment and exclusiveness	defense, habitual use	establishing and maintaining boundaries
Taylor, 1988	<i>...an interlocked system of attitudes, sentiments, and behaviors that are... specific to a particular, usually delimited site or location which... in the context of individuals in a group or a small group as a whole... reflect and reinforce, for those individuals or groups some degree of excludability of use, responsibility for, and control over activities in these specific sites (Taylor, 1988: 81).</i>	attitudes, sentiments, and behaviors	excludability of use, control	delimited site

Furthermore, there are environment – behavior concepts related to territoriality that are frequently used interchangeably, such as personal space, jurisdiction, home range, attachment to place, and privacy. Taylor (1988) discusses their similarities and differences as follows;

Personal space and territoriality are concepts related to claiming ownership of a space and exclusive use of that space. In both cases, intrusion is considered a disturbing act, even when the physical environment is used to help delineate or clarify boundaries. Personal space, on the other hand, is attached to the individual and rather mobile, whereas territory refers to a more delimited and bounded area that can be left behind. Furthermore, in most cases, the size of a personal space is much smaller than that of a territory.

Similar to territories, *jurisdiction* over space is defined as the right of access to a specific bounded area. They are larger than personal spaces but not as large as territories. However, jurisdictions are dependent on the functional role assigned to the holder, so they are more temporary and withdrawn when the assigned role is completed, as in the case of the electrician or plumber granted temporary access to the home territory.

The term "*home range*" refers to a larger area that includes daily activity areas of individuals that are frequently visited. As a result, home range is the arena in which various territories are nested.

Attachment to space is similar to territorial attitudes, but it applies to larger scales such as nations and is less dependent on physical space.

There is a two-way relationship between *privacy* and territorial functioning. The desired level of privacy sought may determine territorial functioning, while occupants enjoy additional benefits once in that territory.

Behavior settings are regularly occurring, temporally and spatially bounded person-environment units. Territorial functioning serves to maintain behavior settings by territorial markers signaling appropriate kind of behavior in a setting and by physical and behavioral processes that support the behavior setting programs (Taylor, 1988).

Finally, the construct of human territoriality can be illustrated as flow diagram below:

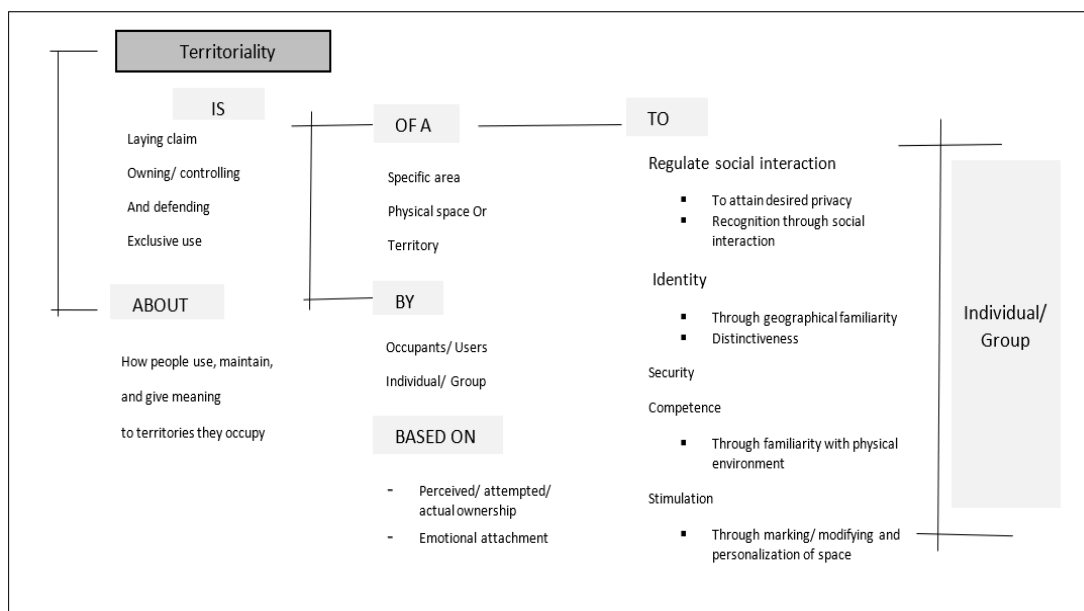


Figure 4. Flow diagram of human territoriality (compiled by author based on literature review).

Territoriality and Physical Environment

Environmental determinism, environmental possibilism and environmental probabilism are the three primary streams of thinking in man-environment relations. Physical determinism, on the other hand, falls short of understanding the complex

interactions between environment, actor, and behavior. Furthermore, it ignores the impact of social traits and personal attributes such as an individual's level of competence in this relationship (Porteous, 1977). As a result, the relationship between physical environment and territorial functioning is more of a probabilistic one than a deterministic one. In this case, rather than being a determinant of behavior, the environment can be modified to promote or inhibit certain behaviors (Porteous, 1977, p.58). Territoriality is a fundamental concept that both guides and enables us to comprehend man-environment relations.

Territoriality operates on a variety of scales, from the intra-individual (the person) to the inter-individual (the small group) to the community level and is context and content dependent at each level (Edney, 1974). At each size, the mechanisms are different, but the impacts and advantages are typically the same. Territoriality minimizes the amount and complexity of information an individual needs to absorb by giving order and predictability through its spatial and cognitive organization qualities, while also promoting the individual's efficiency in developing more sophisticated behaviors and adaptive efforts (Edney, 1976). Furthermore, as one goes away from lower levels of territoriality, such as the house, feelings of responsibility, recognition of users, and control over outsiders decreases (Taylor, 1988).

The dynamics of territoriality alter at each scale in terms of cognition and behavioral patterns. In this regard, the physical structure of space is one of the most important predictors of how that space will be used, but social and cultural patterns also influence the uses and meanings of that space (Castell, 2010). Though physical form has a significant impact on territorial functioning, it has a different effect depending on the scale of the territory. In this context, Porteous (1976, p.385)

proposes the following relationship between territorial scale, territorial control, and physical environment, based on Hall (1969):

“At lower levels of territoriality, such as personal space, personal control is predominant, but fixed space is absent. At more extensive levels of territoriality, such as the individual’s daily range or orbit, fixed-feature space is dominant, but personal control is strongly reduced because of the presence of others.”

Territorial production and types of territory. According to Karrholm (2007), “territorial production occurs everywhere while these territories can either be permanent or temporary.” It means that territories can be produced or formed anywhere. There are different contexts, different ways and different means in which a territory can be produced. The scale of a territory can also varies, it can be a parking lot, an urban district or city, a nation or it can also be someone’s favorite bench to sit on. Karrholm defines four ways of territorial production.

- 1 Territorial strategies
- 2 Territorial tactics
- 3 Territorial associations
- 4 Territorial appropriations

a. ***Territorial strategies.*** Karrholm (2007) defines territorial strategies as preplanned impersonal strategies which are planned before time and space.

- b. ***Territorial tactics.*** Territorial tactics are the ways of producing territory by personal relationship between the person or group of people and the territory.
- c. ***Territorial associations.*** According to Karrholm (2007), territorial associations are not planned beforehand, and they are characterized by the usage of that specific place such as climbing tree, gravel path or walking track of a park or bathing places.
- d. ***Territorial appropriations.*** These are territories which are produced by consistent and repetitive usage of a place or area by a person or group of people. They are considered as the home of user such as the favorite table at restaurant or one's home or one's home street.

Another way of production and formation of territories is defined by cognitive mapping. In this, home is considered the basic focus of territories and is most detailed in the cognitive mapping specially by children and women.

Types of territories. In 1975, Altman gave a threefold typology of territories which is based in hierarchical order. This classification is based on the degree of control, comparative duration of users' use and claim of space, and use of the occupant. These territories are based on the cognitive influence of the space on the resident, the duration of occupancy and the outsiders' visits producing a sense of ownership. Following are the types as given by Altman.

1. Primary Territories

2. Secondary Territories
3. Public Territories
 - a. **Primary territories.** These are the territories which are owned by the resident and are used exclusively by the users or group of users as their own. These territories are controlled on permanent basis and have central significance in the lives of the user or occupants. Home is the best example of such territories. Their absence for a long term may consequently form a lack of self-esteem and self-identity.
 - b. **Secondary territories.** These territories have less significance in the everyday lives of the individual and are semipublic in quality. Their ownership is not permanent and is durable and users may vary through time, but the user have some sort of control and ownership. They can be offices or classrooms used by officials or students.
 - c. **Public territories.** These are public places and have free access to them. They have free occupancy rights. Their usage is governed by governmental laws and regulations and their usage is limited in time.

Another classification of territories is given by Brower in 1980. His classification is focused on occupancy and occupant and how they exert control over the said space. According to Brower, there are four following types of territories.

1. Personal Occupancy

2. Community Occupancy
3. Occupancy by Society
4. Free Occupancy Territories

According to Brower, occupancy types define a territory and since occupancies change over time, the type of functioning of a territory also changes with them. Personal, communal, and societal occupancies are controlled by individual, group of individuals and society respectively but the free occupancy is controlled by the environment. Another classification of territories in human society is given by Lyman and Scott (1967 cited in Sommer, 1969). Lyman and Scott classified human territoriality into four categories.

1. Public Territories
2. Home Territories
3. Interactional Territories
4. Body Territories

Public territories have free access, yet they are regulated by the law and regulated of the country. Home territories are private spaces which are owned and controlled by the individual used by public yet regulated by individual or group of individuals. Interactional territories are the space which are used for social gatherings and have clear land demarcations. These also have rules of access. Body territories belong to individuals and a strictly private and non-violate spaces.

These classifications are based on proxemics theory developed by Hall (1969). Hall defines proxemics as the distance or space between a person and the place

inhabited by them. According to Hall, the distance defines the relationship between a person and space. Hall classified this hierarchy into four categories.

1. Intimate distance
2. Personal distance
3. Social distance
4. Public distance

Hall classified territories as well according to the level of proxemics and physical configuration.

1. Fixed feature space
2. Semi fixed feature space
3. Informal space

Fixed feature space is the way of designing space, cities and areas which can govern and regulate the activities of men inhabiting it. Semifixed feature space is formed by mobile or transient materials which can be changed or moved according to the changing need. Informal spaces are based on distances which are maintained by others in the daily personal encounters.

After Hall, Goffman in 1971, also classified territories based on their 'claim'. According to Goffman, the claim defines the organizational pattern of a territory. Following are the categories by Goffman.

1. Fixed territories
2. Situation territories

3. Egocentric territories

Fixed territories are geographically placed and organized such as houses, lawns and yards, situational territories are permanent equipment in a space like a bench in the park or tables at a restaurant. Egocentric territories are the possessions which move with the person from one space to another, for example purses and handbags.

In 1972, Newman classified territories into four major categories which are further classified into others. They are as follow.

1. Private Spaces
2. Semiprivate space
3. Semipublic space
4. Public space

These categories, according to Newman (1972), are the key element to maintain and achieve safety and security which is the most significant need of human territory. These classifications show how historically territoriality is classified by different theorists on the multiple basis. This thesis draws its theoretical insight from the model of territoriality given by Taylor (1988).

Taylor (1988) identified four types of settings in which territorial functioning occurs, based on their 'centrality' (importance of a setting): (i) *Spaces within residential settings*, (ii) *Spaces immediately outside residences*, (iii) *Regularly used settings* (workspace, etc.), and (iv) *Public locations, temporary territories*. As one moves from the most central to the least central locations in this classification, space

becomes less multipurpose (such as the home vs public library). Furthermore, group boundaries disintegrate, and the distinction between occupants and non-occupants becomes less obvious. Although identical causal processes for territorial functioning apply to settings of variable centrality, territorial tactics, and repercussions, as well as the importance of different types of consequences (psychological, social psychological, and ecological), differ depending on the type of territory (Taylor, 1988).

Territorial boundaries between different areas, such as the private and public sectors, may move horizontally and vertically throughout time, in addition to their forms. Variations in territorial depth come from these adjustments. In the horizontal axis, lot divisions can be shifted in times of urban densification to allow for the construction of larger or more masses within the same block's territory, public streets can be enlarged towards private lots due to traffic, dead end streets can be transformed into controlled spaces of the small community, as in the Dutch "woonerf" implications, or neighbors can negotiate to shift the zoning.

In the case of urban densification, rising density leads to an increase in the territorial depth as well as an expansion of the private territory. In the vertical axis, private property may run over public property in the form of "covered roadways," or sidewalks may be leased for private usage temporarily (Habraken, 2000).

Overall, the main principle of territorial organization of the urban built environment can be recognized as the continuity, or flow, across different territories, ranging from the most private to the most public. At each scale, however, territorial claims, claim longevity, and defense measures to protect each claim differ.

Territoriality exists in urban area at several scales, ranging from the informal small scale, social network-based level found in street block neighborhoods to the larger scale of property ownership and national borders (Castell, 2010:3). Territorial organization, on the other hand, has different meanings at different scales of the urban environment (Figure. 5).

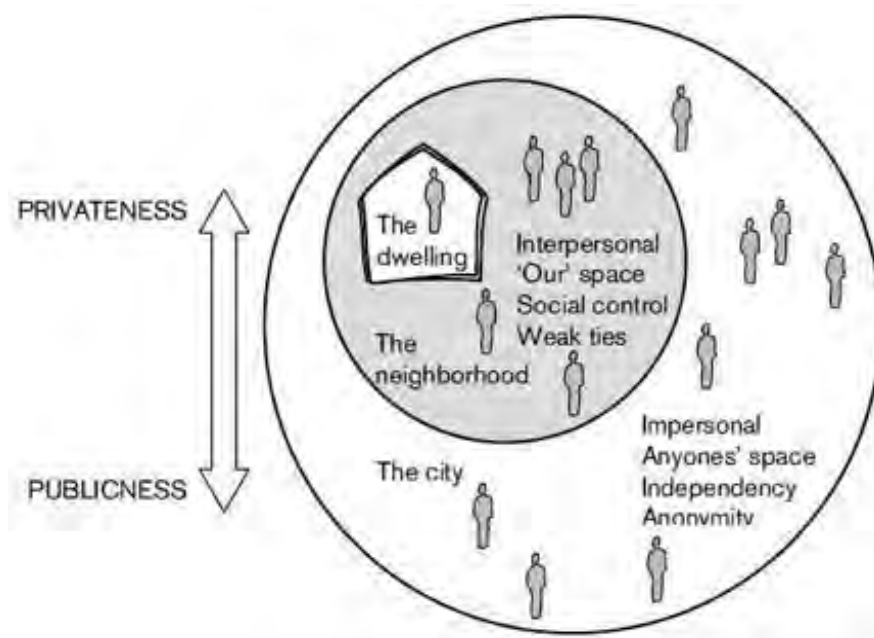


Figure 5. Different scales of territories in urban space (Castell, 2010, p.10)

Different conceptualizations for comprehending man–environment relations with respect to territorial organization of urban area have been proposed. In this regard, Parr (1970), Stea (1970), Roos (as cited in Porteous, 1977), and Porteous (1977) each established four primary theories (Figure 3). Based on territoriality, Parr (1970) established a basic model for understanding an individual's interaction with his environment. The 'territory' is defined as the place claimed and defended by people or organizations as their own, whereas the 'orbit' is defined as the wider

space across which an individual usually or occasionally roams. In addition, the orbit could have two or more territories (e.g., home, office).

The physical characteristics of the physical environment must be considered while studying the territorial organization of urban space. At lesser scales, the physical environment has an impact on and even influences territorial functioning. As a result, it is possible to assert that different environmental designs show diverse territorialities. Stea (1970) proposes a conceptualization based on the daily territorial behavior of city dwellers in this regard. The inhabited portion of space by an individual or a group is defined as the 'territorial unit,' which has its inhabitants, occupants, and occasional visitors; the sum of frequency visited the territorial units and paths taken to reach them is defined as the 'territorial cluster,' while the sum of total territorial clusters of a given community is defined as the 'territorial complex.'

These territorial units, according to Stea (1970), have qualities such as size, shape, number of units, extensiveness, kind of boundary, differentiation, and relatedness, all of which have direct effects on territorial functioning. He also mentions that mental maps can be used to investigate the perceived nature of units, clusters, and complexes. A change in the defining qualities of territorial units has an impact on the behaviors that occur within them, and a change in the behavior pattern has an impact on the territory. In other words, Individual behavior is influenced by changes in the shape, size, boundedness, and distinctiveness of the territorial cluster or territorial unit. Increased permeability of external boundaries of areas within office spaces, for example, leads to a loss of autonomy and psychological stress due to the restriction of alternative behaviors and freedom of movement.

Although the model proposed by Roos (as cited in Porteous, 1977) is like prior models in terms of distinguishing a prime territory and an orbit based on this base territory, it elaborates the microenvironment of individuals and defines the orbit as a circumscribed area rather than a path. The model divides territorial organization in the environment into four main components: range, territory, core area, and home. Range is defined as the total area traversed; territory is defined as the area defended; core area is defined as the area mostly occupied by the individual; and home is defined as the area slept in.

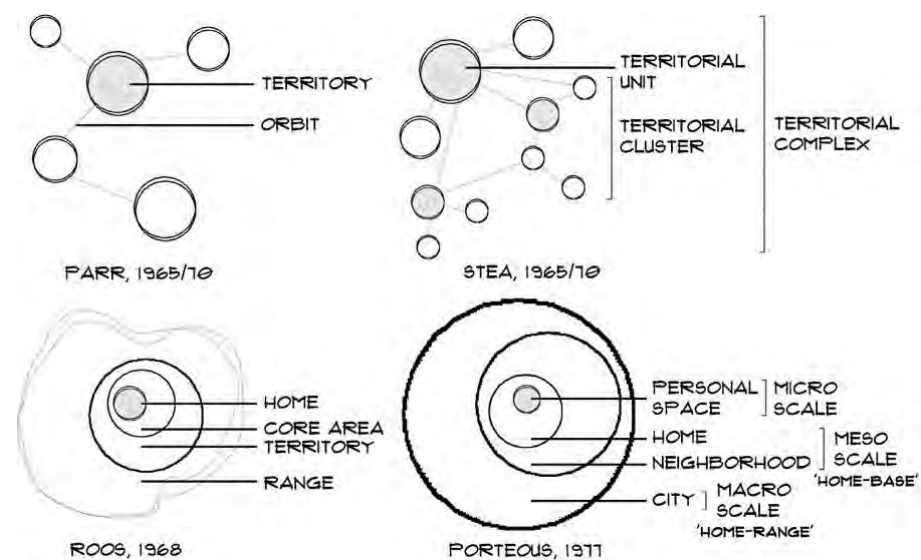


Figure 6. Theories of urban territorial organization (taken from Oya, 2019 based on Parr, 1970; Stea, 1970; Roos as cited in Porteous, 1977).

Porteous (1977) proposed a trifold series of nested spaces in daily life, each size having its own distinctive territorial meanings, namely the micro space as the personal space, the meso space as the dwelling territory such as in neighborhoods, and the macro space as the city. Each of Porteous' (1977) scales can be briefly addressed as follows:

Micro scale (personal space). First, there is the micro space, which is a personal space that is actively protected against incursions to maintain a high level of privacy and individuality. Other than personal bubble (individual's body) Micro space can also refer to a larger territorial unit, such as an office or a bench, and even collective scales, such as a small group inhabiting a restricted space, in addition to the personal bubble of seclusion around the body zone. When it is not related with fixed feature aspects of the surroundings, personal space becomes mobile (Porteous, 1977).

Meso scale (home and neighborhood). The meso space, on the other hand, is a bigger semi-permanent and semi-static space actively guarded by an individual or a small primary group. The house and the yard are examples of meso space territorial units that are mostly immobile but can be shifted at intervals. Meso space is frequently referred to as the home-base, referring to an area that serves as a base for an individual or a small group, with the primary purpose of meeting housing needs such as resting, reproducing, and so on (Porteous, 1977).

Home base refers to both the house's extensions, such as its facade and yard, as well as the more collective level of near-home territories, where additional needs are met within proximity. Taylor and Brower (1985: p.183) state in this regard:

Home does not end at the front door but rather extends beyond...those exterior spaces adjoining the home: porches, steps, front yards, back yards, driveways, sidewalks, and alleys. These spaces are of crucial interest for two reasons. First, they immediately adjoin the home; consequently, what happens in these outside spaces strongly influences the quality of life in the home. Second, they represent spaces where the two major types of settings in residential life—the private, personal, and owned versus the public, shared,

and open to the community—interpenetrate. Consequently, these settings are of considerable interest for understanding the dialectic between individuals and local society’.

Outdoor residential spaces such as the front yard, porches, alleyways, sidewalks, and the street itself, according to Taylor (1988), are part of the home and serve as a bridge between the individual or household and the immediate local society. As a result, the private world of the residence is nested within the shared space of the local society - the neighborhood - within these spaces (Hirschon & Gold, 1982). Furthermore, patterns of functional activity, behavioral forms of socialization occurring within that territory, and dwellers' attribution towards that territory can all be detected when it comes to territorial organization of outdoor residential habitats (Lay, 1998: p.187).

Home base, on the other hand, can be broken into smaller pieces. In this sense, Taylor et al. (1981) used three categories of territories in their research of Baltimore neighborhoods: *home, near-home, and off-block territory*. Kusenbach (2008) conducted another study in which a four-scale hierarchy was used to refer to sub-categories for the home base, including: *‘enclaves’* of people with similar lifestyles and socioeconomic status or cultural quarters; *‘walking distance neighborhoods’* resulting from residents walking and nodding habits; and *‘street blocks,’* where neighbors know each other by face and name, and *‘micro setting’* which refers to connectivity of small group within street or block.

Table 2

Hierarchy of urban communities

Dimensions Zones	Practical Use	Sentiments	Neighborhoodly Interaction and Relationships	Collective Events and Representations
Micro settings	Mutual visibility of private and semi-private routines	Trust, dependency	Passive contacts, sociability, Proactive neighboring, friendships	Informal gatherings, nicknames, 'reputation' of places
Street Blocks	Leaving and arriving, short outings, children's play	Tolerance, responsibility	Friendly greetings, sociability, reactive neighboring	Block-based social events, defense in emergencies, block captains
Walking Distance Neighborhoods	Recreation (walking) daily needs	Familiarity	Recognizing others, nodding relationships	Formal organizations, newsletters, neighborhood events, names or nicknames
Enclaves	Lifestyle necessities, shopping, errands, leisure	Comfort, belonging	Identification of peers, assumed connection and understanding	Holidays, festivals, landmarks, area names or nicknames

(Source: Kusenbach, 2008, p.232)

Furthermore, territoriality presents itself in a variety of ways at this scale. The most common forms of manifestations in this regard are maintenance of the home, the space in adjacent to home, and even the sidewalk in front of the home; and personalizing exterior of home (façade) to indicate the owner's identity ('the personal imprint on the external environment'); (Hirschon & Gold, 1982). Habraken (2000, p.194) discusses the following variations at this scale:

The relationship between form and territory is inherent in forms of enclosure: housing compounds, halls, and rooms are defined by perimeter walls. Network forms, such as the street net that defines urban blocks, still represent enclosure forms. But at a scale larger than physical enclosure, networks and supply forms may invite territorial interpretation in their own right'.

The *housing of the individual and the small primary group'* in the form of clustered apartments or solitary mansions; and the *near home territory'* are both included in the meso scale. Furthermore, when a group shares a common sense of belonging to an area, such as in ethnic and small-town communities, a "group home-base" forms. (Porteous, 1977). To put it another way, home base can reach communal (collective) levels such as community scale.

Macro scale (home range). Finally, there is macro space, which is the whole region where an individual travels outside of their home base for simple tasks such as obtaining food or satisfying other desires. The home range refers to the territory covered in macro space. The term "home range" does not refer to a distinct unit of space that is totally occupied or defended, but rather to the public arena, where individual occupancy is limited to pathways and nodes and the area is only momentarily defended at nodal areas during occupation (Porteous, 1977).

The area comprising an individual's commonly visited areas is known as his or her home range. For example, a person's house and adjacent areas, workspace, and often visited bar. It is referred to as the individual's "activity space" by planners and geographers, and the sites in the home range that are more intensely used are referred to as the "core areas." As a result, the individual's viable territories are bordered and surrounded by his or her home range. Different territories are nested within the home

range, in other words. The home range and lower scale territories have different levels of control and excludability. Home range resources are open to all and do not require exclusion, but resources in lower scale territories are more selective and may require some excludability (Taylor, 1988).

Models of Territorial Functioning

Territoriality or territorial functioning is defined as ‘a class of environment-behavior transactions, concerned with the issues of personal or group identity, cohesiveness, control, access and ecological management’ (Taylor, 1988). Generally, territoriality refers to the management of the environment which surrounds individual or group of individuals to maintain and regulate their social interactions, promote a sense of attachment, place identity for the individual and community. Bell (1990) defines territoriality as the ‘set of behaviors and cognitions a person or group exhibits, based on perceived ownership of physical space.’

Sense of territoriality is not just limited to the emotional and psychological attachment, but it extends its circle of influence on abstract forms of control through economic, legal, and institutional means over space (Madanipour, 2003). The appropriation of territory or territorial appropriations is *urban inhabitants’ resistance to the power elites’ faceless domination of urban spaces, it is when they claim their right to the city and create places out of abstract spaces’* (Castell, 2010). It refers to the creation of a common space which may or may not threaten other public groups, but it provides a sense of belongingness and security to the social group inhabiting it. Human territoriality is a dynamic aspect which transcends the spatial and temporal context. As discussed earlier, the rise of rapid transportation may have changed the meaning of space and time for human communal sense, it also has changed the design

of environment inhabited by humans.

Such transitions put more weight in the importance to study human territorial functioning and it varies with places. It means that it is very specific to the time and culture of the place. The markers, behaviors and cognitions of territorial functioning are very specific to the areas. The scale of territorial functioning is more applicable to 'microscale delimited areas' such as home street or the block street. According to Taylor (1988), territorial functioning reflects the responsibility and control over small groups of people and specific sites.

Levels of territorial functioning. According to Taylor and Brower (1985), there are two main scales of territorial functioning.

1. Block scale
2. Neighborhood scale

These scales include attitudes, behaviors, and markers which are affected by factors involved in the territorial context. Taylor claimed that territorial functioning is interposed on individual and near-home territorial scales. Attitudes includes the feelings of receptibilities towards the territory and how one perceives the perception of control. Control here refers to the sense of security available on larger scales in the sense of stranger-ness and belongingness and security in the sense of surveillance or presence of physical security measures. Behaviors are derived from the response to intrusion and perception of control. The markers are the signs and embellishments which are present in a said territory.

In another earlier study by Taylor, Gottfredson, and Brower (1981), the different dimensions of territorial functioning were examined. Case study of Baltimore

neighborhoods were taken to study territorial functioning at different scales. Taylor examined that off-block territory starts from outside the home and it extends to the corner store or nearby playground. There are different levels of territorial functioning even on block level. Different markers and behaviors were recorded and later on these were correlated with the cognitive patterns of residents of that block and the problems faced by those residents. It was concluded that there is a direct correlation between the physical, behavioral, and attitudinal components.

Since this thesis derive theoretical insight from Taylor's model of territorial functioning, it is important to study it in detail. Taylor (1988) also describes certain causal model which can investigate factors that design territorial functioning and the results of these functioning. Following is the list of determinant elements of territorial functioning.

1. Cultural elements
2. Social elements
3. Intrapersonal/individual
4. Physical variables

In outdoor residential space, territorial functioning is derived from these basic elements which are called the determinants and the consequences. At this level, territorial functioning is manifested in *cognitions or attitudes, marking behaviors, and actual behaviors.*

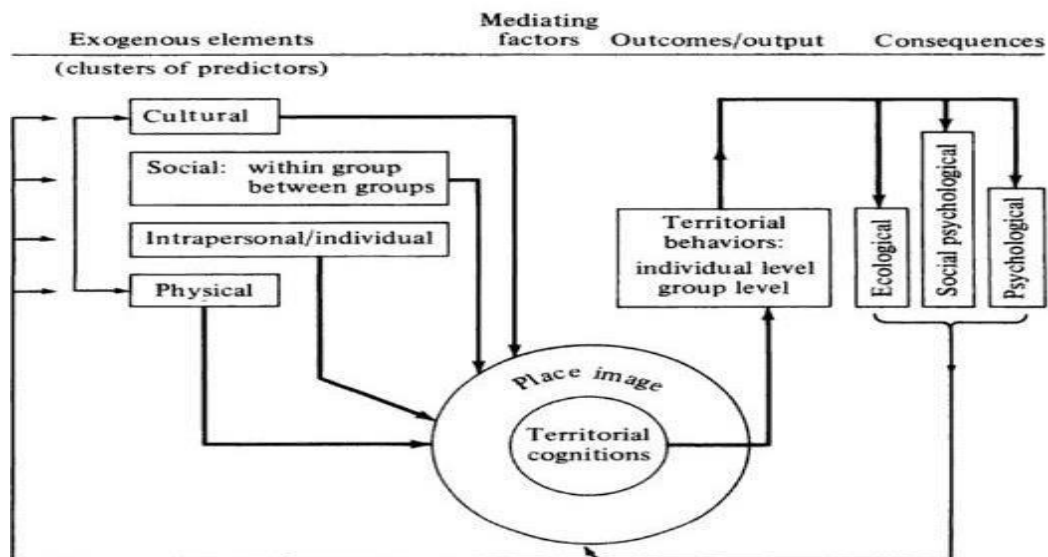


Figure 7. Conceptual model of human territorial functioning (Taylor, 1988, p.92)

These basic elements are interconnected with each other and function together. Following is the list of determinants and consequences of territorial functioning at near home territories.

Determinants:

- i. Personal and related constructs
- ii. Cultural and subcultural factors
- iii. Physical design factors
 - a. Siting and Land use
 - b. Street form and Number of people and traffic
 - c. Boundaries
- iv. Social factors
- v. Time

Consequences:

- ii. Individual psychological consequences
- iii. Social psychological consequences
- iv. Ecological consequences

Another theorist Je (1986) developed another model of human territorial functioning. This model functions for the assessment of human territorial functioning in different spatial types and is based on empirical data collected from the streets of Philadelphia. It investigated the correlation between the physical environment surrounding human and its impact on human performance and work results. The main variables in this model of human territoriality are as follow.

- i. Environmental variable
- ii. Predispositional variable
- iii. Behavioral variable

According to Je, environmental variables comprise of physical layout of the street and house street relationship. It includes the social crowding, number of pedestrians, and privacy/ anonymity. Predisposition variables are further divided into two categories.

- i. Motivation
- ii. Competence level

Motivation includes safety, self-esteem, self-actualization needs pf the person. Competence level of predispositional variables include economic status including income, time length of residing in that specific community and the ownership of the house.

Behavioral variables are further classified into three categories.

- i. Automatic behaviors
- ii. Active behaviors
- iii. Passive behaviors

Automatic behaviors are the territorial behaviors that later turn into environmental message. Active behaviors are based in motivation and competences of the individual while passive behaviors move from stimuli to individuals. More passive behaviors are seen between environmental variables and predispositional variables while automatic and active behaviors directly correlate to territorial performance. As it is discussed earlier, territorial functioning in humans is majorly discussed at two levels, micro and meso. Iranmanesh (2012) investigated human territorial functioning at the level of residential environments in the form of case study of walled city of Nicosia, North Cyprus.

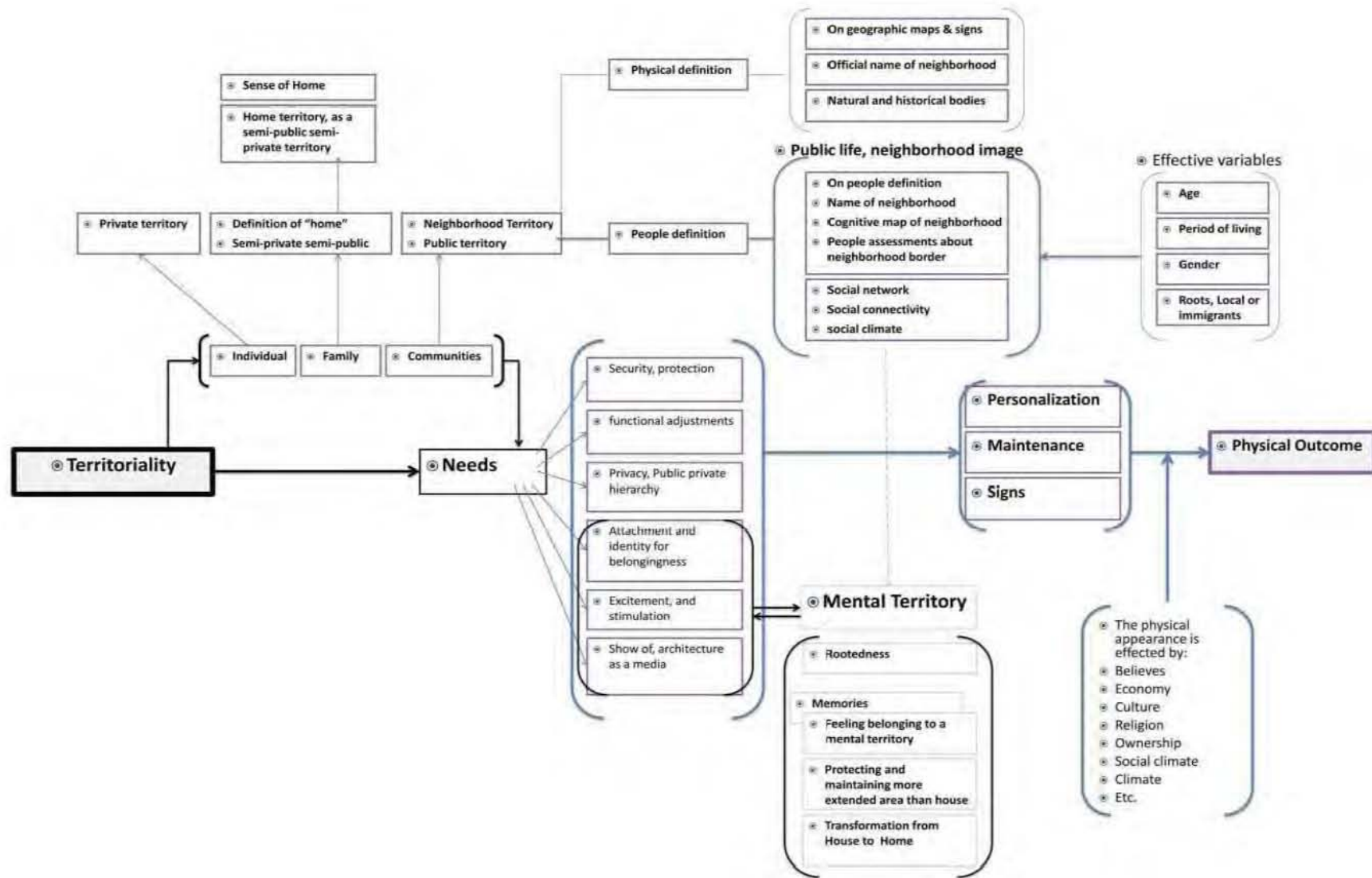


Figure 8. Territorial functioning at the residential scale (Iranmanesh, 2012, p.31)

–Territorial functioning is a combination of both cognitions and behavior patterns related to a place that are shaped by these cognitions. In return, these have environmental, societal, and psychological consequences both in the form of attitudes and self-esteem at the individual level and community building and social order for living in a shared space at the social group level” (Iranmanesh, 2012).

These are few models that explain the concept of human territoriality and its functionality. Almost all the models of territoriality shed light on two major concepts: territorial cognition and territorial behaviors which will be discussed in the following sections.

Territorial Behaviors

In humans, territorial behavior includes verbal and nonverbal, setting altering and maintenance behaviors (Taylor, 1988). Territorial behavior, on the other hand, primarily entails territory marking and personalization, exclusive use of territory, and control and defense of that area. (Gifford, 1997; Farkisch et al., 2015; Brown et al., as cited in Farkisch et al., 2015). Territorial behaviors govern social interactions while also ensuring the social order of a territory remains stable. They operate by using boundary control mechanisms to prevent unwanted social contacts as well as eliciting social interaction. Demarcation and/or decoration of space with territorial markers are examples of territorial behavior. Fences surrounding the house, ‘saving a seat,’ or family photos on the workplace desk, for example, enable nonverbal communication, sending environmental messengers to users and outsiders about the ownership of the area and the owner's personal or collective identity (Greenbaum and Greenbaum, 1981).

Territorial marking, on the other hand, is an important aspect of territorial behavior because it allows for inter/intra territorial control using signs and barriers, which enhances place attachment. Human territorial activities, on the other hand, include territory control and defense. Humans prefer territorial control over aggressive defensive strategies. Human territorial defense is frequently managed using nonviolent techniques such as language for negotiation, customs for behavior guidance, and legal systems for dispute resolution. Control, on the other hand, can be active or passive, and it can be exercised not just over territory but also over space, ideas, and other resources within that territory. Furthermore, the type of territory has a direct relationship with the level of territorial control (whether it is primary, secondary, or public) (Gifford, 1997). Territorial control is ensured by two methods: marking and personalization, and territorial defense (Porteous, 1976).

Control over territory is regulated by the 'appropriation of space,' which contains three main elements: occupancy, defense, and attachment, according to (Brower, 1980). In this context, occupancy is characterized as personal occupancy, communal occupancy, occupancy by society, and free occupancy, depending on the controls that exist within that place. Defense, on the other hand, can take the shape of boundary surveillance and control, and the usage of territorial signals. The feeling of possessiveness that an occupant has toward a particular area due of its connotations with the self-image or social identity is characterized as attachment to place. Strengthening residents' sense of attachment is also vital in this regard to make a space more defensible. Strong commitment to a place leads to increased personalization of space by its occupants, which serves as a symbol of occupancy.

Territorial behaviors are defined as efforts to directly control the access and activity of others in a specified territory. Territorial behaviors are the production of both markers and signs in this context (Taylor, 1988). Personalization and marking of a territory are the most popular way of declaring territorial claims and communicating ownership of an area (Gold, 1982). To prevent territorial violations, markers are used to show ownership and provide messages to outsiders that the territory belongs to someone (Altman, 1975). Personalization and marking provide psychological benefits such as "feeling at home" and "home-field advantages" in addition to notifying others of a claim over a place (Gifford, 1997). At each size, territorial claims are also asserted in a distinct way. Property ownership, for example, can be established through official market transactions as well as using walls and security systems (Castell, 2010).

Territorial markers. Territorial markers, on the other hand, are the most basic representations of a claim to an area. Natural landmarks such as rivers, visual clues such as claws and bites on trees, and audio cues in animals are examples of these markers. Markers serve as a symbol that a location has been claimed, show its boundaries, regulate social processes and activities inside those boundaries, and represent the owner's identity. Territorial markers aid in activity control by communicating the kind of activities that are permitted and prohibited within that territory; in addition, barriers, and physical arrangements both limit and facilitate interaction. Even though animals utilize tangible territorial marks, humans prefer to employ signs. Signs, barricades, and personalization of the territory, which includes environmental props such as nameplates, fences, and graffiti, are examples of such

markers. Within the geographical hierarchy, markers also serve as boundary delimiters between distinct domains (public to private) (Sell, 1983).

Behavioral traces, levels of upkeep, indicators of beautifying, signs of identity, and barriers are examples of territorial markers that transmit messages to both outsiders and fellow residents in shared spaces (Taylor and Brower, 1985). For example, leaving coats or books on a chair or table (Gifford, 1997), as well as distribution of goods, decorating, and gardening, can all be included as behaviors that suggest that a space is utilized, owned, or cared for (Taylor et. Al., 1981). Other instruments for defining boundaries (Farkisch et al., 2015) include fences, hedges, signs, controlled access pathways and guards (Altman, 1975). Physical and symbolic barriers that are used to govern behavior in a particular space, are referred to as territorial markers (Lynch, 1960; Madanipour, 2003).

Territorial barriers, on the other hand, are distinct in terms of visibility and permeability (Edney, 1974). Signs, on the other hand, are frequently used to build and maintain spatial order between different territories. Signs are physical expressions of who is permitted and how they should behave within a given zone. Signs can be formal and physical, such as signboards that say, Ladies' or Private Road, or they can be more informal and intangible, such as women avoiding crossing dark routes at night or street gang graffiti on the walls prohibiting other street gangs from their territory (Castell, 2010). To put it another way, territorial demarcation can be both physical and metaphorical, such as being psychologically discouraging (Lay, 1998). Territorial markers, as previously said, can be physical elements such as signs, locked gates, high fences, high demand gardening, seasonal decoration, and upkeep, all which stem from a desire to regulate boundaries. As a

result, territorial markings are the visible result of activities such as upkeep, decoration, alteration, and enhancement of space.

Personalization of space. Furthermore, personalizing is another form of marking space that shows the individuality of the person who does so, such as employees personalizing their workspaces with photographs or souvenirs, or gang graffiti as a statement of authority over an area (Gifford, 1997). Personalization of place is a declaration of identity and a technique of assuring stimulation, whilst defense of space comprises both psychological (rituals such as knocking, and personalization of the house may also assert mental security) and physical security measures (Porteous, 1976). Personalization is the process of reflecting an individual's identity, background, and aspirations through environmental cues and creating a space "his/her own." Personalization's major goal is to communicate one's identity to the outside world while also reinforcing one's sense of self through presenting cues from memories and sentiments about oneself, as well as stimulating memories through individualized environments (Zeisel, 2006).

Personalization behavior gives a "sense of security," as well as "adjusts the surroundings to better fit activity patterns" (Lang, 1987). Routine and socialization are also key behaviors and practices that human employ to customize, manage, and use various territory (Karrholm, 2007). Routine behavior patterns on a neighborhood street, such as people sitting in groups on the corner or children playing on it, which are part of the street's meaning and identity, are likewise a control mechanism in this sense. Life on the block is a complex network of overlapping, primarily rhythmic routines, Taylor and Brower (1985) said in this regard, highlighting the role of routines in the territorial claim over space.

Residential environments and territorial behaviors. Control over access to territories and ongoing activity within those territories, as well as challenges in the absence of such restrictions (e.g., vandalism and terror) are key components of urban residential territorial functioning. Taylor et al. (Taylor et al., 1981, p. 290). Territorial behaviors such as exclusive use of territory as a resource base, control and defense through physical and metaphorical barriers, signs, and personalization are all important for territorial functioning in residential situations. Residential territories are the key resource base exclusively used by its occupants, according to past talks. Furthermore, claiming a specific area grants access to certain resources, and the territorial structure and behavior of a group are defined by the group's resource needs (Sell, 1983).

In this manner, the residential spaces become the key source to provide daily amenities to its occupants. As a result, it is proposed that neighborhoods (residential territories) have the functionality to support everyday living needs as well as a diversity of uses to maintain a community. Although, because of increased mobility and online services, residential territories are no longer the main source for inhabitants' daily requirements, instant access to specific functions is critical to maintain and sustain a household within a residential territory. Control and defense of territory at the scale of residential surroundings can also take place at higher organizational levels, such as inside and between neighborhoods through neighborhood organizations. Residents' power to speak out against planning measures that are against their will, as well as other undesired incursions into the shared territory, is strengthened by these organizations. Additionally, these organizations

promote social cohesion and place attachment, which encourage people to adapt and preserve their common space.

Defining human territoriality for the present study. The extensive literature review on human territoriality presented in this chapter was mostly from the field of environmental psychology. The literature on human territoriality revealed that the notion is rather broad and encompasses many place-related cognitive and behavioral aspects. Furthermore, the extensive literature review not only provided valuable insights but also helped in designing the present study. It is important to mention here that the present study is exploratory (discovery-oriented) in nature and to achieve this purpose the constructs of interest ‘Human territoriality and territorial cognition’ are defined broadly with minimal theoretical conceptual framework (see guiding theoretical conceptual framework at the end of this chapter). Taylor’s (1988) extensive work ‘*territorial functioning model*’ and Taylor and Brower (1985) concept of ‘*psychological significance of home and near home territories*’ provided the initial guidelines and helped in comprehensively organizing the initial idea for the present study. For the present study human territoriality (based on extensive literature review) is defined as ‘*a multifaceted phenomenon with interconnected spatial, behavioral, social, and cognitive components, related to perceived or actual control/ ownership of a territory (by individual/group), that occurs differently on different spatial levels.*’

Environmental Cognition/ Territorial Cognition

The studies on human territoriality led to another important concept of environmental cognition, which is considered an important concept within the field of

environment-behavior studies. In general, it explains the mental process through which individuals perceive and make sense of their social and physical environment (Casson, 1981). A large body of literature exists on cognition within the field of psychology, but the concept of environmental cognition has been treated somewhere in the middle of perception- cognition continuum (Rapoport, 1977, 2005). The conceptual merging of two concepts of perception and cognition is not uncommon within the field of psychology, where the two terms are usually used in metaphoric sense (Canter, 1977). The attempts to understand environmental cognition have been popular since the inception of ‘cognitive revolution’ in 1950s within the fields of psychology, sociology, anthropology, and education (Sun, Marsh, & Onof, 2008). Different meanings have been associated with the concept in different theories within different disciplines. The existing literature on environmental cognition presents two opposing theoretical paradigms: *Information processing theory* and *Situativity theory*.

Information-processing theory of cognition. The most popular approach to understand cognition till the day is information processing theory. This approach has dominated the understanding of cognition within the field of psychology since its inception (Proctor & Vu, 2006). This approach views the concept of environmental cognition with a more internalized lens. It relies on the perceiver-environment dualism and conceptualizes that mental process produce environmental cognition (Lachman, Lachman, & Butterfield, 1979). This approach believes that cognitive understanding is somewhat generalizable across different individuals and environments, this approach relies on internal psychological processes through which individuals being a cognitive agent receive information of their environment and that information generates mental representation of received information. The mental

representation of received information is generally called as schemas (Bartlett, 1932; Hochberg, 1964; Neisser, 1976), scripts (Lee, 1968), or images (Boulding, 1956).

The information processing theory has profoundly dominated the cognitive research (Norman, 1993). The research on cognitive mapping within the field of environment-behavior studies is one example. Its influence can also be seen in some design theories for example Rapoport's work on "filtering" personal and cultural components from environmental cognition (Rappoport, 1977, 2005). Studies following this approach treat environmental cues as the source of stimulus information. In other words, environmental attributes are treated as stimulus which are being processed mentally to create mental representations.

Situativity theory. The second approach to understand environmental cognition is situativity theory or ecological approach. Since 1990's the ecological approach started gaining popularity with the work of Gibson within the field of psychology and other fields of social sciences. Although, Gibson's work (Gibson, 1966, 1979; Gibson & Reed, 1979) was limited to the spatial understanding of perception especially with reference to visual perception, he also introduced the concept of '*environmental affordance*' and his work set the precedent for future ecological theories. Subsequently, the researchers and theorist have since promoted the ecological understanding of human behavior and environmental cognition (Greeno, 1994; Oaksford, 1986; Shaw, Turvey, & Mace, 1982; Turvey, 1992; Turvey & Carello, 1985, 1986).

Within the fields of ecological psychology and environmental psychology, the prominent work was done by three theorists: Barker's (1968) theory of '*behavior setting*', Gibson's (1979) theory of '*environmental affordance*' and, Canter's (1977)

Theory of place. These theoretical lenses are considered foundations, to understand issues of environment-behavior studies (Lang, 1987) since last four decades. All three theories have overlapping concepts, but they provide ecological understanding of human behavior with reference to their environment. Since last two decades, a large body of research has started explaining the *embedded* or *situated* understanding of cognitive processes (Barsalou, 1999, 2008; Marsh, Johnston, Richardson, & Schmidt, 2009; Niedenthal, Barsalou, Winkielman, Krauth-Gruber, & Ric, 2005; Schubert & Semin, 2009; Smith & Semin, 2004).

Although opinions on the specifics of what embodiment involves differ (Alessandroni, 2018; Pouw & Looren de Jong, 2015), they are all critical of the standard cognitivist framework that views the mind as a separate information processor. Instead, one's physical, physiological condition is considered as playing a fundamental part in mental activity, meaning that psychological activity must be explained not just in terms of representations and mental models, but also in terms of the full physical organism's actions. The importance of situations in guiding ideas, emotions, and behaviors—structured by the social and physical qualities of the world—highlights the need for psychologists to think beyond the individual's head and consider the broader context in which psychological activity occurs.

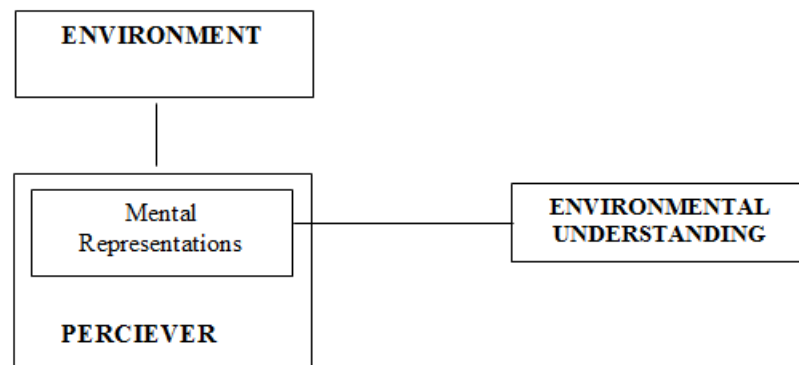
Many meta-theoretical positions held by proponents of Information-processing are criticized by Situativity theory. It views the cognitive agent and the environment as relationally or mutually defined entities rather than separate units with independent ontological validity, and it constructs the perceiver-environment interaction as reciprocity rather than dualism (Heft, 1997). In other words, this viewpoint believes

that the holistic perceiver-environment system is irreducible and so cannot be easily split into subsystems for further analysis.

The method through which the agent makes interactive interactions with the environment is regarded to be how cognition is actualized. Environmental understandings are cognitive products that are situated in and arise from actions that are co-determined by the agent's intention and the context's attributes (Schliemann, 1998). Sitativity theorists claim that the true center of cognition is in the interaction activities involving a cognitive agent in a particular context, not in an individual's mind capable of constructing and representing the surrounding environment (Greeno & Moore, 1993).

The situativity theory evolved as a major intellectual movement in psychology and cognitive science, challenging the supremacy of the information-processing paradigm (Calvo & Gomila, 2008). Many social and cultural academics who realise the merits of the situativity method have invented and introduced terms like (socially) situated cognition, situated action, and embodied cognition (Smith & Semin, 2004). The embeddedness of environmental cognitive processes and the systematic links between perceiving individuals and the environment are frequently seen and investigated in real-world scenarios in studies adopting this paradigm (Xu, 2015).

Information Processing Theory



Situativity Theory

Situated Perceiver-Environment System

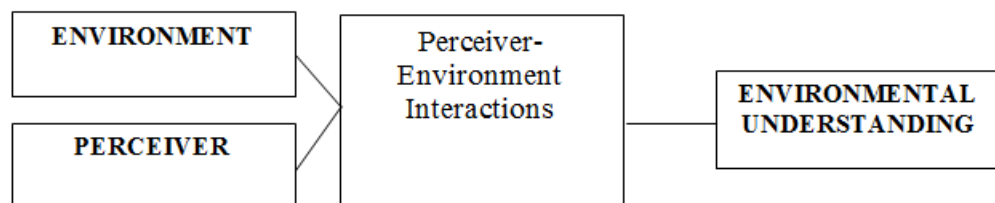


Figure 9. Showing the two contrasting environmental cognition paradigms: Situativity Theory and Information-Processing Theory

Environmental cognition in this study. As Figure 6. above shows, the distinction between the two contending paradigms in terms of environmental cognitions stems from their different conceptions of environmental cognitive processes and the roles of the environment and perceivers. The information-processing model assumes that environmental settings and perceiving individuals are independent entities, and that environmental cognition is an internal process that takes place entirely within the head. This model's research focuses on understanding brain mechanisms and mental representations of mind, as well as their connections to external factors. The situativity theory, on the other hand, recognizes the mutuality of perceiving agent and the environment, and this mutuality provide foundation of environmental cognition, which is always embodied through the situated interaction

between people and the environment as two inseparable parts of one and the same integral unity. The situativity approach's empirical studies have concentrated on the perceptual and behavioral interactions between humans and their environment as reciprocally defined entities in relation to one another.

Situativity theory will be employed in this study to provide a theoretical base for investigating territorial cognitions in various urban residential environments. The following are some of the reasons why situativity theory should be used: To begin with, the situativity theory has received less attention and research in empirical studies. Due to its rejection of "the separateness of contexts and psychological processes" and treatment of them as "aspects of a holistic unity" (Altman & Rogoff, 1987, p. 27), situation theory is also regarded as an exemplar par excellence of environmental psychology's "transactional worldview," which has been argued to be "a potentially fruitful vantage point" for understanding psychological and behavioural phenomena (Altman & Rogoff, 1987, p. 36).

Despite its widespread acceptance in cognitive science, environmental psychology, and social psychology, situativity theory has yet to be theoretically incorporated into today's environmental behavior research, and its empirical application is even more limited (Xu, 2015). Second, the broad purpose of this study encourages the application of situativity theory. The situativity approach, which emphasizes contextuality and situatedness, is particularly promising when used to investigate individual persons' subjective interpretations of the physical environment, the derivation of which inevitably mobilizes a variety of personal, social, and spatial contextual factors that meaningfully mix to form a concrete and multi-dimensional person-environment relationship. My local examination of home perception and

experience requires a situativity approach's broad scope of observation and depth of analysis.

Overview of Methodological Issues in Investigating Physical Environment in Environmental Psychology Research

Psychology as a science has been traditionally interested in environment behavior interactions in a very general way. However, the basic interest of this new field of psychological inquiry rested on psychology's concomitant discovery of the importance of the spatial-physical dimension of the environment as constituting part of human actions and experience at the intrapersonal, interpersonal, group, intergroup, and societal levels (see Stokols & Altman, 1987a, 1987b). Thus, attention was first given to the spatial-physical property of the surroundings where human behavior takes place. At the same time the importance was often stressed of considering it not in a "molecular" but in a "molar" sense (Craig, 1977; Ittelson, 1973). However, not by chance, Hall (1966) defined this spatial-physical property as "the hidden dimension" since its influence and relevance for human psychological processes often tends to remain outside individual and collective awareness. As Proshansky and Fabian (1986) observed:

The objective physical world and its properties has consequences on the behavior and experience of the person quite often without his awareness." Under these circumstances, the individual can neither identify nor verbalize these influences, and indeed it is only by objective analysis of the external observer" that this influence of the physical environment on the person's behavior and experience can be determined. However, the influence of the physical settings on the behavior and experience of the person that bypass"

awareness and interpretation by the individual cannot and should not be ignored. (p. 25)

It is important to note that this discovery in the field of psychology was due to some pioneering studies. They were characterized by an incidental interest in those aspects mainly developed as part of other research aims. These include the human factors in work performance (Mayo, 1933), the development of social influence networks (Festinger, Shachter, & Back, 1950) and the analysis of the “stream” of human behavior in natural settings (Barker, 1968). All these studies were guided by a common general methodological interest in studying human behavior in its natural setting by using the methodology of the field experiment (Festinger et al., 1950; Mayo, 1933) or of nonobtrusive observation in natural settings and qualitative methods, as in the ecological psychology of Barker (1968, 1979) and others. In all these cases the crucial importance of the specific features of the physical surrounding was at the core of the research findings, although typically as part of other unexpected results.

However, other pioneering psychologists also played a crucial role since they were open to receive and develop ideas coming from disciplinary areas that bordered on psychology and were traditionally interested in studying behavior in natural contexts. These areas included cultural anthropology about human and animal proxemics (Hall, 1966), animal ethology (e.g., Ardrey, 1966), and microsociology (e.g., Goffman, 1971). Also, they were generally opposed to the main experimental and laboratory-based method used for psychological research and consequently were more willing to use other methodologies such as field experiments and observations, both natural and systematic. Barker’s (1968) early studies on behavior settings in

ecological psychology and Sommer's (1969) and Altman's (1975) studies on personal space, territoriality and social behavior remain as cornerstones of the early environmental psychology.

As noted by Canter (1983), to be concerned with the spatial-physical environment, psychology had to get out from its habitual place, that is, the research laboratory, which was the traditional domain of psychological research but, by definition, a non-environmental. In general, enthusiasm over the emergence of this new field of inquiry was the result of psychologists' uncertainty over or dissatisfaction with the *social relevance* of their research and the *ecological validity* of results obtained in the laboratory and with the consequent search for a "real world psychology" (e.g., Proshansky, 1978). This frequent dissatisfaction can be traced to the various forms of ecological demand specifically raised since the 1940s and 1950s by various authors and psychological schools (i.e., from Lewin and Brunswick onwards; see Bonnes & Secchiaroli, 1995). This trend later developed into what has been called "decontextualism" or the "decontextual revolution" (Altman & Rogoff, 1987; Stokols & Altman, 1987), which arose in most fields of psychology during the 1970s and 1980s and which in many ways is still active today.

This revolution is certainly at the core of the development of environmental psychology, particularly in its transactional-contextual approach, which has been progressively accepted since the beginning (Altman & Rogoff, 1987; Ittelson, 1973; Saegert & Winkel, 1990; Stokols, 1978, 1987; Wapner, 1987; Wapner & Demick, 2000). Initially, two main theoretical psychological traditions promoted this new awareness of the crucial effect physical features of the everyday environment have on human behavior and experience (see Bonnes & Secchiaroli, 1995). The first

theoretical tradition refers to the psychology of perception as developed in the more ecologically oriented perspectives of the *new look* school, Brunswik's (1943, 1957) "lens model," the transactional school of the Princeton group (Ittelson, 1973; Kilpatrick, 1961), and Gibson's (1966, 1979) "ecological approach" to perception.

The second tradition is based on the social psychology approach evolved through the pioneering work of authors such as Lewin (1946), Tolman (1948), Barker (1968), and Bronfenbrenner (1979). The first tradition is more associated with a "molecular" approach to the spatial-physical environment. It places specific attention on the discrete sensory-perceptual features of the environment, considered to have a direct correspondence at the sensory-perceptual level. The second tradition pursues a more "holistic" or "molar" perspective (Altman, 1975; Ittelson, 1973), which developed in the "transactional contextual" approach to the person environment relationship as systematically outlined by many authors in the first handbook devoted to the field (Altman & Rogoff, 1987; Stokols, 1987; Wapner, 1987). This approach is still considered the main founding theoretical perspective for environmental psychology (Saegert & Winkel, 1990; Wapner & Demick, 2000; Werner et.al, 1992). The main characteristics of this approach can be synthesized as follows (Saegert & Winkel, 1990):

1. The person-in-environment provides the unit of analysis.
2. Both person and environment dynamically define and transform each other over time as
3. aspects of a unitary whole.
4. Stability and change coexist continuously.
5. The direction of change is emergent, not preestablished.

6. The changes that occur at one level affect the other levels, creating new person environment configurations.

Basically, such a view goes beyond the previous distinction between reactive versus active and cognitive versus behavioral forms of psychological processes, moving toward a more unified vision of them. However, this transactional-contextual approach often remained an ideal program, being difficult to be realized in the common research praxis. Following this tension between wide theoretical intentions on one side and empirical and methodological practices on the other, the physical environment or *physical setting* has been increasingly considered as a socio-physical environment with a growing emphasis on the social aspects of both the physical environment considered and the psychological processes involved (Bonaiuto & Bonnes, 2000; Bonnes & Secchiaroli, 1995; Evans & Saegert, 2000; Stokols, 1978; Stokols & Altman, 1987; Wicker, 1987). In this perspective, the *place* construct, with related environmental-psychological processes, became a central socio-physical unit of analysis, used to complement the original physical setting. It was conceived as an experiential unit of the geographical environment (Russell & Ward, 1982) with both an individual and a collective dimension consisting of (1) spatial-physical properties, (2) activities, and (3) cognitive and evaluative experiences or “meanings” (Relph, 1976; Rapoport, 1982) related to both these activities and physical properties (Bonnes & Secchiaroli, 1995; Canter, 1977, 1986; Russell & Ward, 1982).

Thus, “behavior that occurs in one place, would be out of place elsewhere. This place specificity of behavior is the fundamental fact of environmental psychology” (Russell & Ward, 1982, p. 652); “the central postulate is that people always situate their actions in a specific place and that the nature of the place, so

specified, is an important ingredient in understanding human action and experience” (Canter, 1986, p. 8). However, through this socio-physical unit of analysis, the environment is often viewed as mainly: (1) spatially and temporally limited and thus very localized, (2) tending to be primarily static except for human interventions such as the actions of various planners or users of the environment, and (3) able to influence (and also be influenced by) individual behavior and experience outside of personal awareness. This place-specific perspective also developed into other more systemic conceptions, such as the “system of settings” or the “multi-place” or “inter place” perspective (Bonnes, Mannetti, Secchiaroli, & Tanucci, 1990; A. Rapoport, 1990, 2000).

The aim was to overcome the often too narrow intra-setting or intra-place perspective and to move toward a more system-oriented perspective. Emphasis was placed on the prevalent multi-place nature of any individual environmental or place experience and thus on the importance of looking at the placement system of activities to fully understand one place’s activities, evaluations, and characteristics (Bonaiuto & Bonnes, 1996, 2001). Environmental psychology has developed greatly during the last 30 years, mainly along the following lines:

1. Attention to the spatial-physical characteristics of the environment where behavior take place.
2. Variety of research methods adopted.
3. Orientation toward problems with clear social relevance.
4. Interdisciplinary orientation of research (Bonnes & Secchiaroli, 1995).

It is clear from the above discussion that transactional- contextual approach (molar/holistic) emphasizes the reciprocity of human-environment relationship. The present research aims to explore residential environment (gated and non-gated) using the guidelines of this approach. Situativity theory (discussed above) based on molar approach allows the investigation of reciprocal relationship of human-environment, this approach naturally suits my exploration and provides the guiding theoretical conceptualization to study residents territoriality within two residential settings (gated and non-gated). The approach also allowed the investigation of two urban physical layouts (gated and non-gated communities) and helped in exploring the physical attributes of these urban physical layouts and their impact on residents territorial understanding.

Guiding theoretical conceptualization of the present study

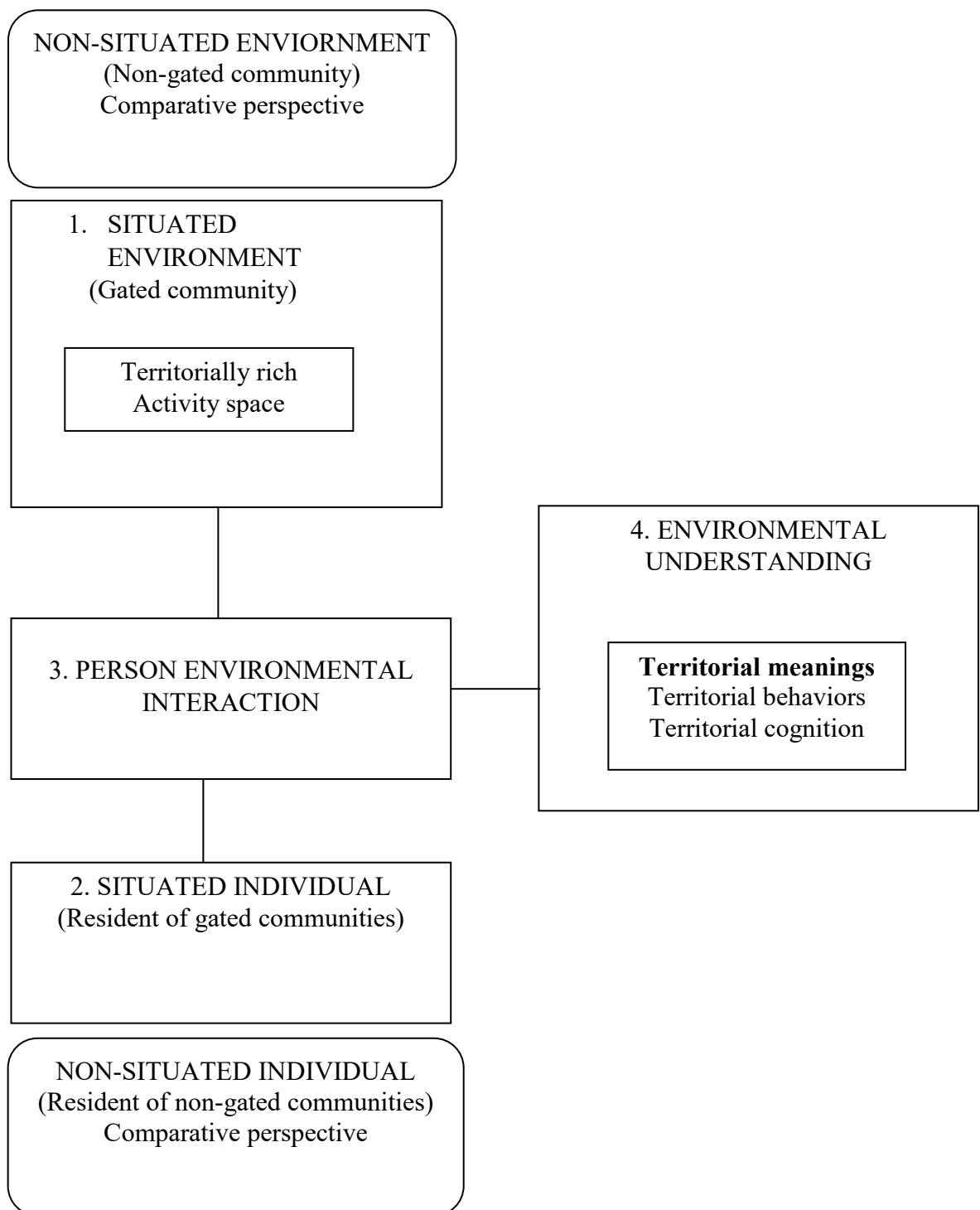


Figure 10. Guiding theoretical conceptualization of the present study

Explaining the guiding theoretical Conceptualization of the Present Study

The current study focuses on the concepts of "territoriality" and "environmental cognition." Both concepts allow for the investigation of spatial, psychological, and behavioral characteristics on a micro and meso geographical scale. As a result, these concepts are more relevant to my research because they allow the physical built environment investigation. The present dissertation's main theoretical lens is territoriality, and it is conceptualized that gated residential communities are a type of "territory" that uses space demarcation (walls, gates, barriers, and security system) and physical markers to distinguish between "outsiders" and "insiders". It is conceived for the present research that by deploying territorial physical markers gated communities are inherently *territorially rich environment* and can invoke territorially related meanings and sense to its residents. On the other hand, it is conceived that non-gated communities will be *territorially lacked environment* and will not invoke strong territorial meanings and sense in its residents.

How individuals "territorially" experience and perceive gated and non-gated spaces, as well as how the physical attributes of home environment influence this perception are explored in this present study. Using Taylor's (1988) *territorial functioning model* and Taylor and Brower (1985) concept of *psychological significance of home and near home territories* as guiding lens the present research focuses on near home territories within two physical layouts (gated near home territory and non-gated near home territory). It is assumed that gated community being *territorially rich environment* will yield more psychological significance than non-gated communities. Taylor (1988) presented the model of territorial functioning

which will be used as guiding lens for the present research. He believed that territorial functioning only occurs in micro level territories (home, offices and one street) and dissipates on meso and macro level. He proposed that territorial functioning should only be investigated on micro level. My initial observation of gated home environments led me to believe that this physical layout of built environment can produce territorial functioning on meso scale (neighborhood level), and present research will attempt to investigate territoriality on meso level.

The notion of territoriality is at the focus of the study since it enables the interrogations on space both from the perspectives of human experience and spatial organization. Besides, examining the dynamics of territoriality within gated and non-gated home environments and putting forth the territorial association of urban residents will provide insights to discuss the dependence on near-home territories and the importance of spaces adjacent to home (in the present study the gated and non-gated residential neighborhood is adjacent home space).

The environment also refers to the external multi-dimensional environments that surround and interact with perceiving agents. People act in certain ways in certain environments and have the mental capacity to make sense of their physical or social situations or settings which is called environmental cognition. In the present study the situativity theory (ecological perspective) is used to provide the theoretical lens for territorial cognition. Considering the situativity theory's increased focus on person-environment reciprocity, this study introduced a pair of interdependent concepts: situated environments (gated community) and non-situated environments (non-gated community), as well as situated individual (resident of gated community) and non-situated individual (resident of non-gated community).

To explore territoriality within gated and non-gated home environments the situated approach is used. Which emphasizes the *‘situatedness’* or *‘embeddedness’* of cognition in environment (settings or situations). For the present study the *‘situation’* of interest is gated community (territorially rich environment), so it is conceptualized as *‘situated environment’* and resident of gated community as *‘Situatæd individual’*. Similarly, the non-gated home environment is conceptualized as *‘non-situated environment’* and resident of non-gated community as *‘non-situated individual’*.

Person-environment reciprocal interaction (situated individual interaction with situated environment and vice versa) will invoke territorial cognition (territorial meanings).

METHOD

Method

Research Design

For the present study, qualitative research design is used to explore the construct of human territoriality within gated and non-gated home environments. Qualitative research design allows in-depth information from non-numerical data and is widely used to gain better understanding of complex social phenomenon (Marshall & Rossman, 2006; Denzin & Lincoln, 2008; Wolcott, 1990). It is most suited to explore the phenomenon at hand, as it allows naturalistic and holistic interpretation in research (Lincoln & Guba, 1985; Denzin & Lincoln, 1994). Marshall and Rossman's description of the value of qualitative inquiry can best explain the suitability of qualitative inquiry for the present study (Marshall & Rossman, 2006). Following are the points taken from Marshall and Rossman (2006):

Qualitative inquiry inherently facilitates the exploration of human actions and how individuals perceive and make sense of the world around. This quality of qualitative inquiry is aligned with the purpose of the present research as it will help in unearthing the authentic accounts of lived experiences of residents of gated and non-gated home spaces.

Qualitative inquiry helps to build context based on non-experimental research and the phenomenon naturally occurring in the real world. The exploration of residential experiences, attitudes and behaviors are hard to be investigated experimentally for obvious ethical and practical reasons; therefore, qualitative approach is best suited for present study.

Qualitative inquiry allows to ask open-ended questions and encourages to begin with fewer preconceived notions or precedent explanatory theories. Residential territoriality is less researched area in general and specifically within the context of Pakistan. The exploratory nature of the present study requires qualitative investigative tools.

The present research intends to unfold the multidimensional phenomenon of residential territoriality and associated social, psychological, and cognitive processes through which residential experiences and attitudes are formed. To get the holistic picture of phenomenon at hand the qualitative tools can help exploring and analyzing the different layers of residential territoriality.

Lastly, qualitative inquiry allows multiple sources of data collection to generate probable explanation of the phenomenon under investigation and similarly, the present study will use multiple sources of data collection tools. Above mentioned points explain the suitability of qualitative inquiry of the present study.

Research Method

Multiple methods were used to collect data simultaneously during the research process. From gated home spaces, semi-structured interviews, field observation, interactive participant observation, and voluntary photography were held. To explore the physical attributes of gated research sites, field observation along with voluntary photography (willing participant residents were asked to identify territorial physical markers in their residential community and pictures were taken, additional pictorial data was taken by the author) and interactive participant observation (willing participant residents were asked to give tour to the community) were used. Participants every day residential experiences and the territorial meanings

in association to their gated residential community were collected through semi-structured interviews. To generate comparative account of residential territoriality, the semi-structured interviews were conducted from the participants of non-gated home spaces.

While gathering in depth information of gated home spaces some informal interviews were also conducted from the authorities of gated communities' local management. These informal interviews were conducted whenever Researcher got a chance during the field visits of two gated research sites. Due to the strict administrative policies of EME, researcher had to visit administrative block multiple times during the field work. During the initial voluntary photography session of the site, few residents took researcher's activities as suspicious, though permission was taken from community's management. Finally, administrative office assigned a resident (member of resident's committee) with the researcher for voluntary photography to reduce suspicion among residents.

Similar incident happened in Eden canal villas as well and the community's management assigned a willing resident to tag along with the researcher. It was instructed by the authorities of both gated research sites to align the visits according to the availability of assigned resident. To understand the socio-cultural environment of gated communities, different social activities in both gated research sites was attended by the researcher. It was a norm in both gated research sites that women held religious gathering every week (Quran recitation and explanation) and kitty parties. Assigned residents invited the researcher in many social activities where fortunate chance was available to observe the unique local socio-cultural fabric of

both gated research sites while further helping in recruiting participants for semi-structured interviews.

Researcher is grateful to the two assigned residents for the help during the field work within their communities. On many occasions, researcher was stopped by guards in both gated sites during the visits of different spatial resources, after catering their suspicion, researcher used the technique of engaging them in informal chit chat to seek information about the security system of gated research sites. Furthermore, during the visits whenever a chance was given to encounter domestic or maintenance workers, researcher used to engage them in informal chit chat to seek their opinion about the gated community and adjacent gated communities which they visit for work.

Sampling Strategies and Participant Recruitment

The first task to conduct the present research was to select appropriate sample of sites (Gated Developments). There are more than two dozen of Gated developments in Lahore. These Gated developments are situated along Bedian Road, Burki Road, DHA Road, Lahore Ring Road and Raiwind road. The site sampling procedure considered variation and accessibility. In order to select appropriate sites, a wide variation in community size, neighborhood spatial design and urban contexts, following Tort's recommendations for strategic non-representative sampling for qualitative research (1997) was used.

Since spatial factors were important for this research, the aim was to choose gated developments with maximum variation regarding neighborhood spatial configuration. The task was to select research sites and research participants that can provide the greatest potential to probe the research questions. During the first field

work for site sampling, it was found that demarcation features and physical markers (walls, gates, barriers, guards, and security cameras) were present in almost all developments, but the difference was the activeness of these markers. To select two gated research sites, which were ‘territorially rich environment’, the gated communities with inactive physical markers were excluded. Gated research sites were selected based on two variations regarding the effectiveness deployed physical markers within gated communities.

First, Active: Gated developments where documental identification is needed to enter or visit the development, EME housing society on canal road, Lahore Pakistan was selected.

Second, permeable: Gated developments where identification is not much needed, and entrance is also based upon verbal inquiry and resistance. Eden Canal Villas, Canal Road, Lahore, Pakistan was selected.

Lahore is a big city with dozens of gated developments at the out skirts of the city and to keep physical context similar (Taylor, 1988) both gated research sites were selected that were located on the same canal road. Distance from one gated site to another was five minutes’ car drive maximum. Keeping in mind the above two variations that we identified in the initial field work for site sampling the first candidate site pool was identified and the final sites were selected from this pool. To generate comparative data, non-gated research sites were selected based on popular perception of residential community among populous.

DHA (defense housing authority) was selected as it is considered to be the elite non-gated residential community of Lahore, and Allama Iqbal Town was selected because it is considered as the famous habitat of middle and upper middle

class. Inner city residential community of Lahore and old traditional ‘Mohalla system’ communities were excluded due to the distinct socio-cultural environment of these areas, as the purpose of the present study was to explore territoriality within two physical urban layouts (gated and non-gated) with minimal socio-cultural variation the non-traditional open residential communities were selected.

The participants from the selected gated and non-gated sites were initially recruited through purposive convenient sampling which led to snowball sampling and then theoretical sampling (analysis of initial data will lead to further theoretical recruitments of research participant).

Overview of Selected Research Settings

To explore territoriality within home environments four research sites (settings) were selected. Gated settings, provided by gated communities were the main inspiration for the present dissertation. It was conceptualized after extensive literature review and counter-intuitive observation, of urban sprawl in Lahore, Pakistan, by the researcher that gated communities are ‘territorially rich home environment’, which will facilitate the territorial sense making in its occupants. Furthermore, it was conceptualized for the present dissertation that gated and non-gated near home space contains psychological significance and in gated home settings this psychological significance will be more apparent. Although, gated home setting was the primary focus of investigation but its natural comparison with non-gated home settings could not be avoided.

To select gated sites, Researcher conducted four field trips to gauge the type of gated communities located on outskirts of Lahore. These four field trips helped in narrowing down the ‘site pool’ for the selection of gated sites. Finally, two gated sites

on Canal Road, Lahore were selected. Both communities were located on same road and five minutes' drive distance existed between these sites.

Research site A (Gated) EME housing society. EME Society, a completely constructed society in Lahore, is located on Multan Road, about 4 kilometers from Thokar Niaz Baig. Defense Housing Authority, Lahore, is the developer of DHA EME Sector, and they seek to deliver great lifestyle alternatives to those living on the outskirts of the city through EME Society, Lahore. DHA Lahore is a "nationally recognized corporate" organization that specializes in creating modern home settings. EME is a geographically large community, and it is divided into nine blocks that range from A to H and block J. EME's general reputation among the populous of Lahore is of an esteemed gated living which offers spacious and clean environments and almost all necessary facilities are available within the community. EME has spacious roads and pathways which are well kept and tidy. The community also has mosques, educational institutes, commercial markets, Hospitals and medical centers, sports club, cricket and football ground and restaurants. A wide range of facilities are available in EME. The community has more than 3000 households.

Research site B (Gated) Eden Canal Villas. Eden canal villas is the project of Eden developers. Eden developers are famous for providing compact residential facilities with community features. They are famous for their small-scale projects to provide housing facility to middle and upper middle class in Lahore. Eden canal villas is a small sized community with 250-300 households. Everyday facilities and resources are available but on much smaller scale. the society is also located on canal road, near Thokar Niaz Biag. Sidewalks and roads are small but neat and tidy.

Mosque, dispensary, water plant, theater, parks, and one small market area is available within the society.

Research site C (Non-Gated) Allama Iqbal Town. Allama Iqbal Town is a public housing plan and residential community in Lahore's south-western outskirts. The LDA finished its construction in the 1980s. The scheme covers a total of 1446 acres (585 ha). It is divided into 2-Kanal, 1-Kanal, 10-Marla, 7-Marla, 5-Marla, and 3-Marla residential plots. The project includes a variety of community facilities, shopping centers, and green spaces. Gulshan-e-Iqbal Park, a large town park, is also located there. Each block has its own set of green spaces and playgrounds. Although this plan is surrounded by other residential areas, it lacks a gate at its entry and no boundary walls. Residents, on the other hand, have constructed gates/barriers within the streets of several blocks to deter crime and to limit public access to their streets or blocks.

Research site D (non-gated) Defense Housing Authority (DHA). The Defense Housing Authority (DHA) is a well-known real estate developer in Pakistan. DHA's housing societies are among Pakistan's most sought-after neighborhoods. Initially, the project was only open to serving and retired army men and their families, but later on, civilians were allowed to purchase homes there as well. DHA Lahore is a world-class housing project in Pakistan that provides a lavish lifestyle, urban infrastructure, and top-notch facilities and amenities in the city's core. DHA, Lahore has grown beyond the city's bounds during the course of its four phases, and various villages and towns on the outside of the city have joined the society. It has 11 phases in Lahore and is the largest non-gated elite residential facility in Lahore. The area is

known for its luxury markets and international restaurant franchises. In addition, DHA Phase 5 is home to Lahore University of Management Sciences (LUMS), one of the city's top and most prestigious educational institutions. It is an internationally renowned university that adds to the project's worth, particularly in terms of property prices in Phase 3. In addition, the Allama Iqbal International Airport and the Lahore Ring Road (orbital highway) pass close to Phase 5 of DHA, Lahore. Through Ghazi Road and Airport Road, the airport is around 23 minutes from DHA Phase 3, 16 minutes from Phase 5 and 6, and 18 minutes from Phase 1. Like Allama Iqbal town, DHA also is a non-gated community but unlike Allama Iqbal Town here residents are not allowed to put gates or barriers to their streets or blocks without the permission of DHA management.

Ethical Considerations

All the data was collected while taking ethical issues under consideration. Permission was sought from the authorities of gated communities to conduct field work. Verbal consent was taken from the resident participants before conducting the interviews from both gated and non-gated research sites. To give full concentration to the participants to make them feel heard and less distressed, all the interviews were audio recorded. Participants were not forced to give answers to any questions which they perceived controversial or difficult to answer. To conduct interviews comfortable surroundings were ensured. Most of the times, interviews were conducted in the comfortable environment of the resident participant's homes. Moreover, the confidentiality of interview data was ensured. Authorities of gated communities were

ensured that field observation data and especially photography data will only be used and published for the academic activities of the present study.

Data Collection Process

For the present study data was collected from the gated and non-gated research fields situated in Lahore, Pakistan. All the data for the present study was collected, transcribed/ coded or analysed by the author. Extensive field work and data collection took seven months. Interviews from the residents were scheduled and conducted by the author along with interactive participant observation and voluntary photography of research sites which was done with the help of residents. In addition to this, during the field work author also took pictures and compiled notes of any relevant observation.

After being done with the site sampling and getting permission for field work from communities' authorities, a pilot study was done by visiting both gated research sites and one interview (see interview guide in appendix A) from each site was conducted. The first interview in each gated field was recommended by the respective community's administration. This process helped in gaining access points and entry into the field. Moreover, this also helped in finalizing the initial interview guidelines and sampling strategies. Through using snowball sampling different residents were approached and recruited for the study. After that, as the data collection and parallel analysis progressed theoretical sampling led the recruitment of research participants and directed other data collection tools as well (field observation: what to observe and voluntary photography: what to capture).

To collect data from non-gated research sites, initial recruitment of participants was done by the personal resources of the researcher and then snowball

sampling was used to recruit participants. Like gated research fields, as the research progressed theoretical sampling led the participant recruitment in non-gated sites as well. The data from non-gated sites were collected for comparative purposes. In total, four research sites, two gated and two non-gated were studied. Total of fifty-five resident participants from four research fields were interviewed (see detail in demographics table). Majority of the participants found the focus of research unique and intriguing, as the research on environmental and urban issues is not very common in Pakistan.

Researcher used to brief every participant before interview and explain the purpose of the study. It was hard to explain to the participants the purpose and implications of the study, yet it was positively surprising for most of the participants that their residential history could help in any scientific research. The language of interview guide, after much effort, was converted into common language words, researcher's fluency in indigenous languages like Urdu and Punjabi made things easier. As a female researcher, apprehensive was felt before conducting interview in residents' homes, but luckily no bad incident occurred. All the participants, owing to social and cultural dynamic of Pakistan, welcomed and treated researcher in a warm way.

Mode of Analysis

The purpose of the research was to explore human territoriality within two urban physical layouts (gated and non-gated), grounded theory with case study approach is used to organize the present research. Grounded theory is a method of generating theoretical concepts based on data (Schwandt, 2007). Grounded theory

uses a highly developed and particular set of processes to assist create substantive theory from qualitative evidence. Data gathering, ongoing comparison of data, continuous evaluation of emergent categories, and continuous theory construction and refinement are all part of the grounded theory technique (Charmaz, 2005, 2006; Glaser & Strauss, 1967; Schwandt, 2007; Strauss & Corbin, 1998).

Grounded theory, unlike standard hypothesis-testing research, begins with a small set of "priori hypotheses." This method of data analysis aids in the identification of important categories for the production and verification of contingent hypotheses "based" in the data. As a result, this method was best suited for discovery-oriented research such as the current one. In the present study, multiple essential procedures of grounded theory approach to analyze data and theory generation were employed, including *coding*, *constant comparison*, *thematic comparison*, and *conceptual theory building* (see Figure 11).

These procedures require constant comparison of raw data (to identify differences and similarities), coding of categories and construct development, plausible relationships among constructs are then found which led to tentative theory formation, emergent theory then scrutinized, modified, and tested as more data gathered and analyzed. In the present study, relevant constructs were predefined in a minimal theoretical conceptualization, and the grounded theory procedures facilitated in identifying and refining patterns and constructs derived from the data.

Researcher also engaged in memo writing, which is an essential element of grounded theory method. Memo writing became reference point for researcher to interpret and transform data and the selection and identification of important categories and themes. This technique also facilitated the researcher to keep tabs of

four research sites and provided opportunity to reflect on researcher's opinion of the research settings (investigator's personal assumptions and subjectivity). This allowed researcher to keep tabs on personal assumptions and helped in enhancing the trustworthiness of the present research.

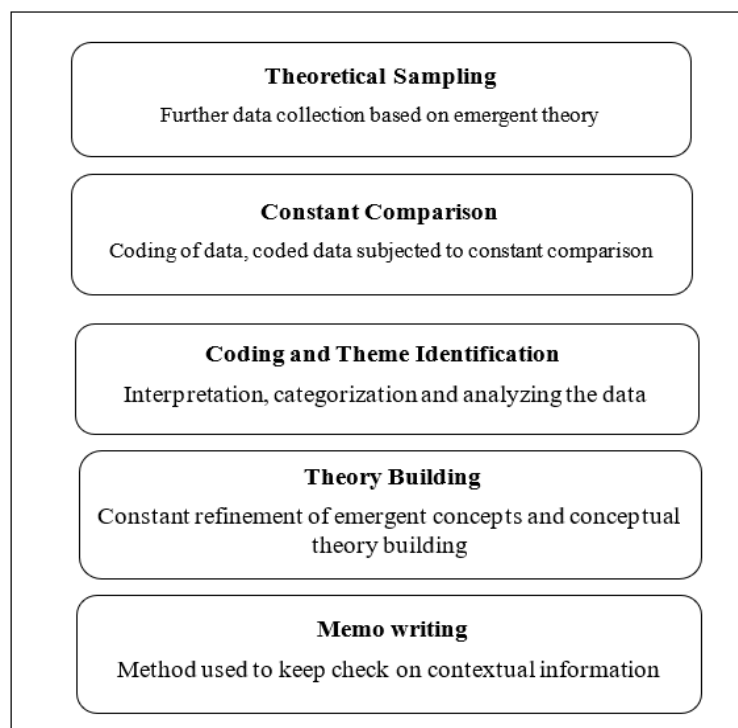


Figure 11. depicts the essential properties of grounded theory (Glaser & Strauss, 1967) and their application in this research.

Grounded Theory and Case Study

Along with grounded theory, the case study approach is employed in the present study. The case study method allows for the investigation of phenomena in their natural setting (Yin, 1994). The primary purpose of the present research was to explore the subjective experiences residential experiences of participants. Dynamic and multitude of contextual factors seemed to be involved in forming these

subjective residential experiences, so naturally the present research called for case-based analysis.

“Individual resident of gated and non-gated developments in Lahore whose unique circle of life occurs within these developments” was defined as a case or primary unit of research for this study.

The data collected from individual resident or with the help of the resident is defined and compiled as one case in the present research. This approach helped in drawing comparative data among different cases (comparison of residential account of different residents) and within the case itself (comparison of different residential experiences of individual resident). Treating individual resident as a case study also helped in gathering the in-depth information about the residential history of individual resident over the span of his/her life. Most of the resident participants have lived in different neighborhoods over the course of their lives and shared insightful experiences about those neighborhood as well as the current ones.

Since the focus of the present research is individual experiences embedded in environment, the contexts (environments/setting) in which the cases are embedded in are inseparable from the cases themselves (Miles & Huberman, 1994; Yin, 2003). The present study included multiple cases of different resident participants from two environmental settings or contexts (gated and non-gated) with the hope of gaining in-depth understating of the phenomenon under investigation (Miles & Huberman, 1994). To study naturalistic and contextual phenomenon, heavy reliance over significant characteristics of grounded theory is embedded within case study approach, therefore, drawing reliable inherent compatibility within grounded theory and case study approach.

In the present study multiple cases that were embedded in their respective setting (gated and non-gated home environments) were investigated. Different settings (physical environment of gated and non-gated communities) were explored, and data was collected to identify the physical attributes of four research settings and through constant comparison emergent codes and themes were derived.

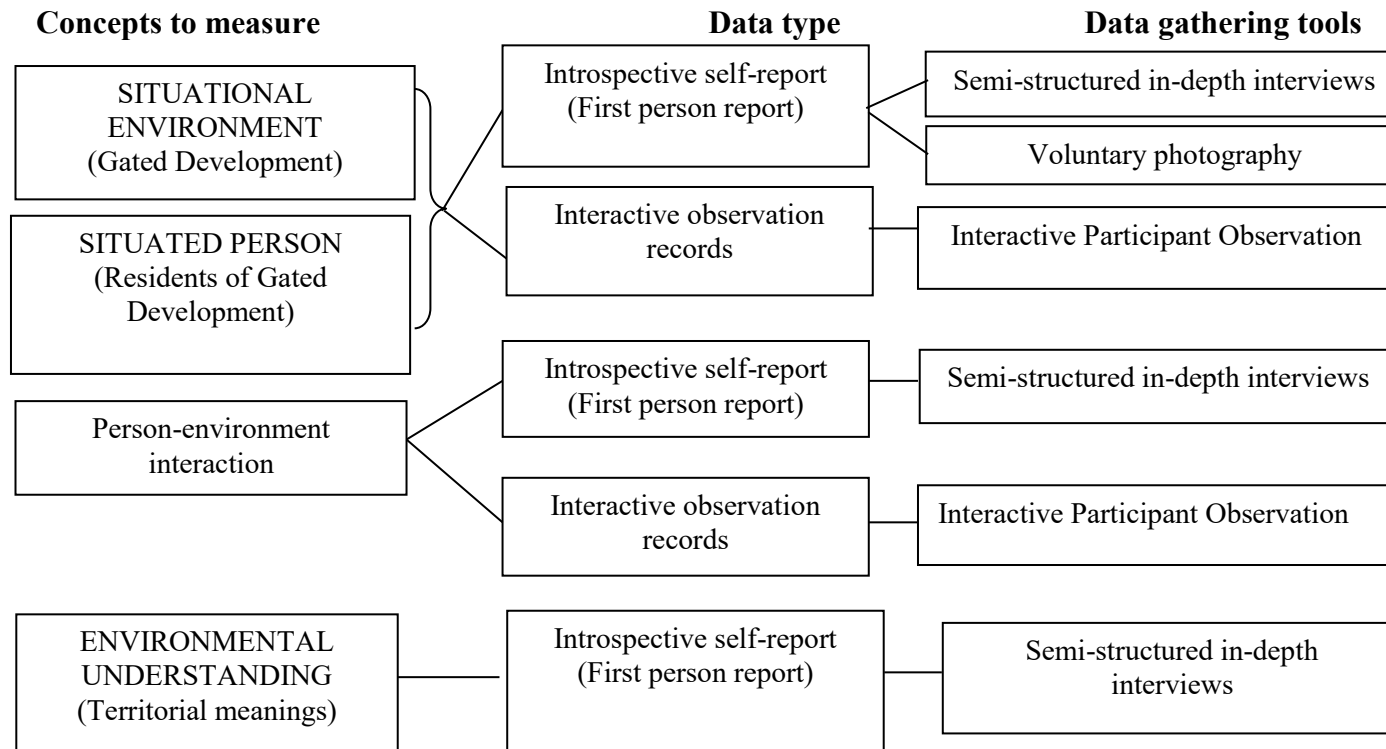


Figure 12. Is showing the concepts measured, data types and data tools used in the present research.

Table 3

Demographic Information about Participants at both Sites (Gated communities)

Participant*	Interview		Occupancy			
	(Min)	Gender	Age	(Years)	Occupation	Family type
A01	56	Man	50s	6	Employed	Extended
A02	74	Woman	40s	17	House wife	Extended
A03	66	Woman	40s	4	Employed	Nuclear
A04	92	Man	60s	12	Retired	Nuclear
A05	87	Man	60s	16	Businessman	Nuclear
A06	60	Woman	50s	5	Employed	Nuclear
A07	78	Woman	40s	3	House wife	Nuclear
A08	56	Man	20s	8	Student	Nuclear
A09	64	Woman	30s	5	Employed	Extended
A10	86	Man	50s	14	Businessman	Nuclear
A11	48	Woman	30s	10	Unemployed	Nuclear
A12	62	Woman	50s	11	Employed	Nuclear
A13	58	Woman	20s	5	Student	Nuclear
A14	71	Man	40s	17	Employed	Extended
A15	59	Man	40s	3	Employed	Nuclear
A16	53	Man	20s	6	Student	Nuclear
A17	47	Man	30s	13	Employed	Extended
A18	42	Woman	20s	4	Student	Nuclear
A19	56	Woman	40s	9	Employed	Nuclear
A20	65	Man	50s	7	Businessman	Extended
A21	48	Man	30s	3	Businessman	Extended
A22	71	Woman	20s	5	Student	Nuclear
A23	55	Man	40s	8	Employed	Nuclear
A24	35	Man	50s	8	Employed	Nuclear
A25	77	Man	40s	2	Employed	Nuclear

Continued...

Participant*	Interview		Occupancy			
	(Min)	Gender	Age	(Years)	Occupation	Family type
	62.64	W (11); M (14)	38.40	8.04		E (7); N (18)
B01	43	Woman	30s	11	Unemployed	Nuclear
B02	86	Woman	40s	13	Employed	Nuclear
B03	53	Man	50s	13	Businessman	Nuclear
B04	92	Man	20s	8	Student	Nuclear
B05	48	Man	30s	10	Employed	Nuclear
B06	55	Woman	40s	5	Housewife	Extended
B07	71	Man	30s	2	Employed	Extended
B08	66	Man	50s	8	Employed	Extended
B09	74	Man	20s	10	Student	Nuclear
B10	58	Woman	20s	5	Student	Nuclear
B11	65	Woman	30s	9	Employed	Nuclear
B12	43	Man	40s	2	Businessman	Nuclear
B13	46	Woman	30s	6	Employed	Nuclear
B14	73	Man	50s	5	Employed	Extended
B15	37	Man	50s	7	Employed	Nuclear
B16	40	Woman	50s	10	Housewife	Nuclear
B17	57	Man	50s	10	Employed	Nuclear
	59.24	W (7); M (10)	37.06	7.88		E (4); N (13)

Note. W = Woman, M = Man, E = Extended, N = Nuclear

*Participant number A01, A02... etc. represent participants at Site A and B01, B02, etc. at Site B.

Table 4

Demographic Information about Participants at both Sites (Non-gated Communities)

Participant*	Interview		Occupancy			
	(Min)	Gender	Age	(Years)	Occupation	Family type
C01	54	Woman	60s	23	Retired	Extended
C02	67	Woman	30s	10	Employed	Nuclear
C03	45	Woman	50s	13	House wife	Extended
C04	77	Man	30s	27	Employed	Extended
C05	47	Man	40s	9	Businessman	Nuclear
C06	63	Woman	40s	18	House wife	Extended
C07	59	Man	50s	8	Businessman	Nuclear
	58.86	W (4); M (3)	42.86	15.43		E (4); N (3)
D01	69	Man	50s	22	Businessman	Nuclear
D02	78	Woman	50s	11	Employed	Nuclear
D03	51	Man	50s	26	Businessman	Nuclear
D04	73	Man	30s	14	Employed	Nuclear
D05	50	Woman	40s	7	House wife	Nuclear
D06	82	Woman	30s	4	Employed	Extended
	67.16	W (3); M (3)	41.66	14.00		E (1); N (5)

Note. W = Woman, M = Man, E = Extended, N = Nuclear

*Participant number C01, C02... etc. represent participants at Site C and D01, D02, etc. at Site D.

RESULTS

Results

The present analysis on human territoriality within the context of gated and non-gated home spaces revealed four major interrelated categories: Physical ease, functional ease, psychological ease, and spatial actualization. Along with it, three selective categories, based on mentioned four interrelated major categories also surfaced i.e., organized vs. disorganized living, territorial meanings, and extended/withdrawn sense of home. The maps of initial codes, axial codes, selective codes, theoretical codes, and the emergent interrelationship between axial and selective codes are presented in figure 13 and figure 14.

In the present chapter, the four major categories and the interconnectivity within these categories is illustrated with associated data. Data analysis led to comprehensive definition of each category which further explains the respective significance in a broader manner.

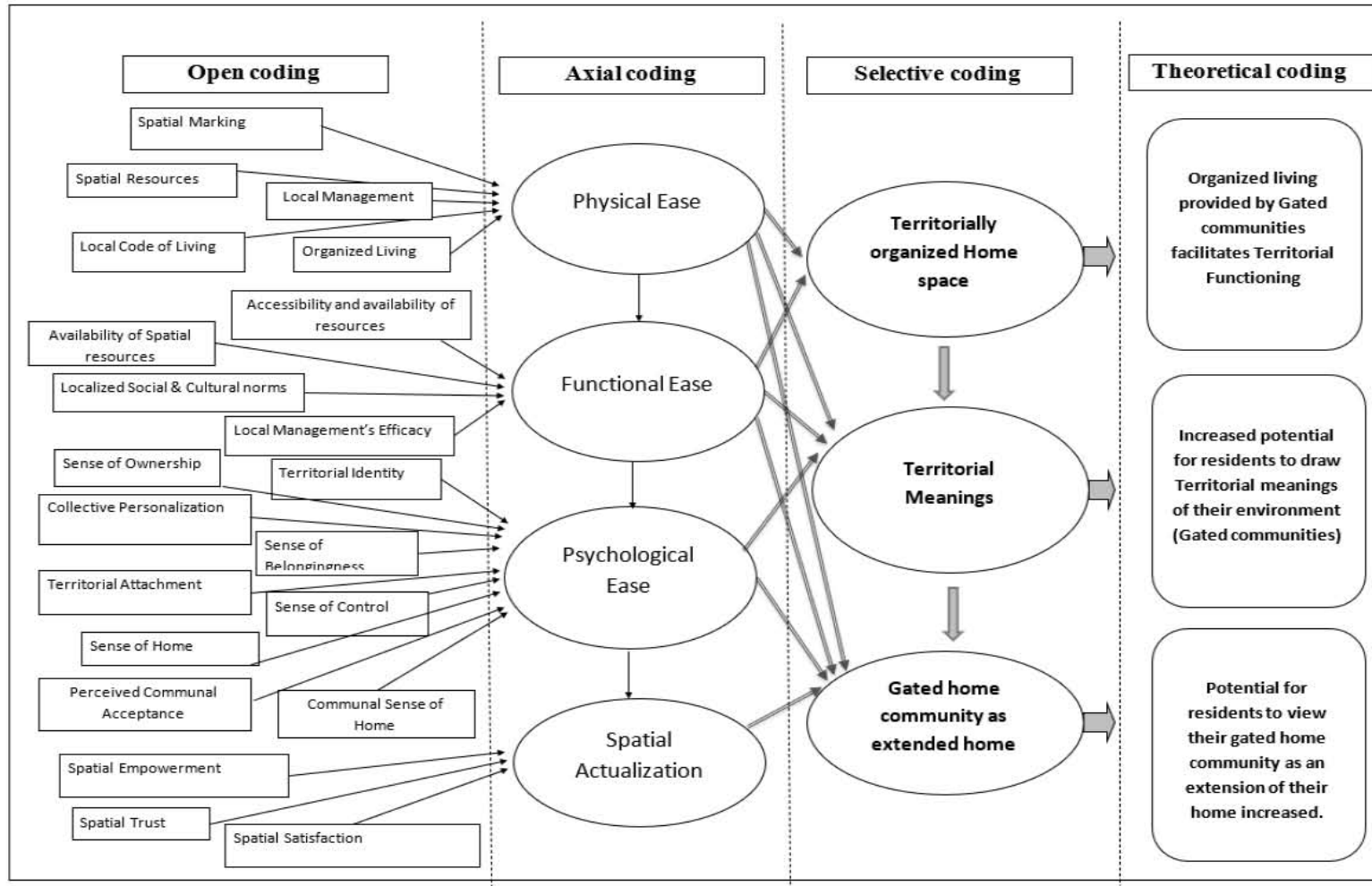


Figure 13. Map of initial open, axial, selective and theoretical coding, and relationship between axial and selective coding for Gated home Spaces.

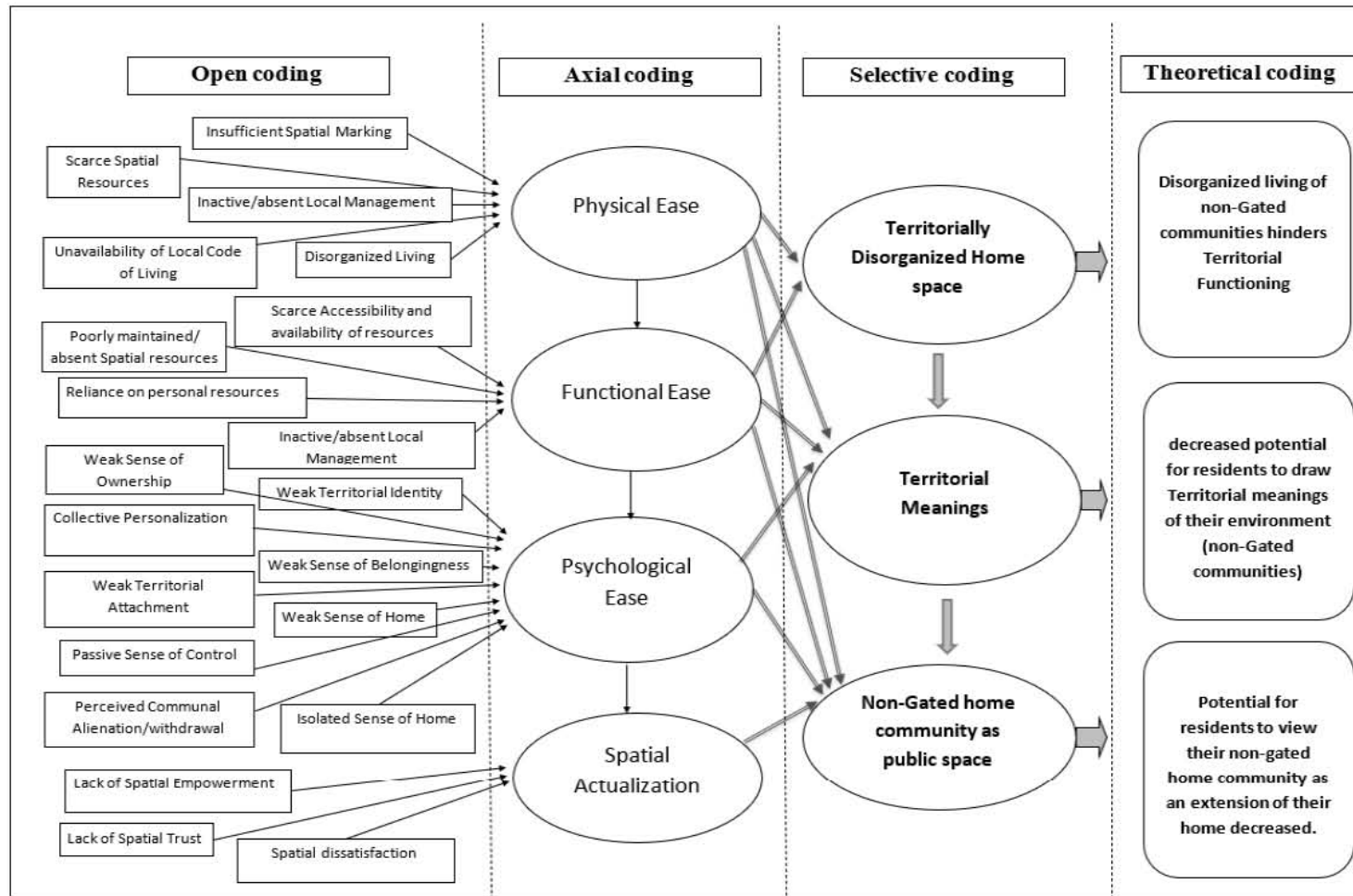


Figure 14. Map of initial open, axial, selective and theoretical coding, and relationship between axial and selective coding for non-Gated home Spaces.

Physical Ease

The first category of physical ease is defined as the degree to which any home environment offers desirable spatial structure and the basic amenities to sustain a household in that environment'. The primary purpose of any space that human beings occupy is to offer physical ease while offering defined relationship with the same place. Within the context of present research, the referred Situated space' is gated communities which can be understood as behavioral expression of human territoriality that communicates the message of exclusively occupied space. The exclusivity of gated home spaces is primarily prominent via organized living resources that it provides to its residents. On the other hand, the non-situated space' is non-gated communities which in contrast do not offer exclusive occupation and organized living.

To build one's own home is a key milestone in journey of life where surrounding space and place comes into consideration in an automatic manner. The data from field observation revealed that the secure surrounding is ensured by implanting and enforcing physical measures not only to mark the territory but also to secure the space for its occupants. Gated communities in a significant and unseen way, provides the opportunity of secure surroundings with physical markings such as structured living style through local management and access to everyday needed resources. Therefore, gated communities, within confined boundaries gives comfort to residents in a distinct and striking manner. In contrast, this discrete spatial marking of space and availability of household amenities is not necessarily available in non-gated

communities. Within the category of physical ease three themes were generated: Spatial (Physical) marking, availability of spatial resources and local code of living.

Spatial mapping of gated home environments. The analysis revealed that the physical ease for the residents of gated communities is based upon their perception of physical markers associated with gated communities, available spatial resources, and organized local code of living. The theme of physical markers and relevant focused codes are presented in figure 15.

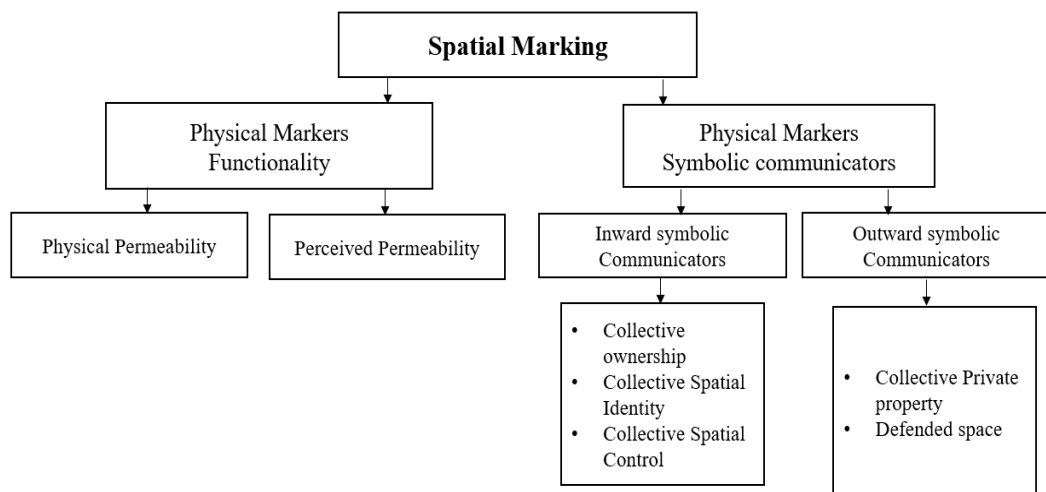


Figure 15. Showing the theme of Physical markers along with focused codes.

Physical markers in gated communities are deployed to restrict easy accessibility to general public within these communities. The primary access to the communities is often minimized by deploying gates, walls, fences, and other surveillance systems, therefore, offering scrutinized access to outsiders as well as providing a sense of safety in its residents by keeping access points less permeable. Permeability is defined as the capacity of an environment providing multiple access points to people within it. The analysis identified two emerging patterns of

permeability in gated home communities: physical permeability and perceived permeability.

Physical Permeability (Gated community) is identified through the spatial exploration of research sites. Physical permeability for two gated research sites was analyzed by identifying the actual physical access points for both sites (see Figure 16 & figure 17).



Figure 16. The figure is showing the sketched map of EME society and seven gates. The main gate and gate no. 2 are functional access points. (Sketched and picture taken by author)

Site A (EME housing society) is a geographically large community and when it was established it had seven gates or access points. Currently, besides main gate, additional gate 2 is used with restrictive entrance of EME's management to access the society. Rest of five gates have become nonfunctional over time by peripheral gated developments over the years. By looking on layout map of site A it would seem a highly permeable space with seven access points, but the data revealed that only two gates are functional, and access is granted after strict scrutiny, which makes the society less physically permeable.

The permeability analysis of spatial layout of Site B (Eden canal villas) is presented in

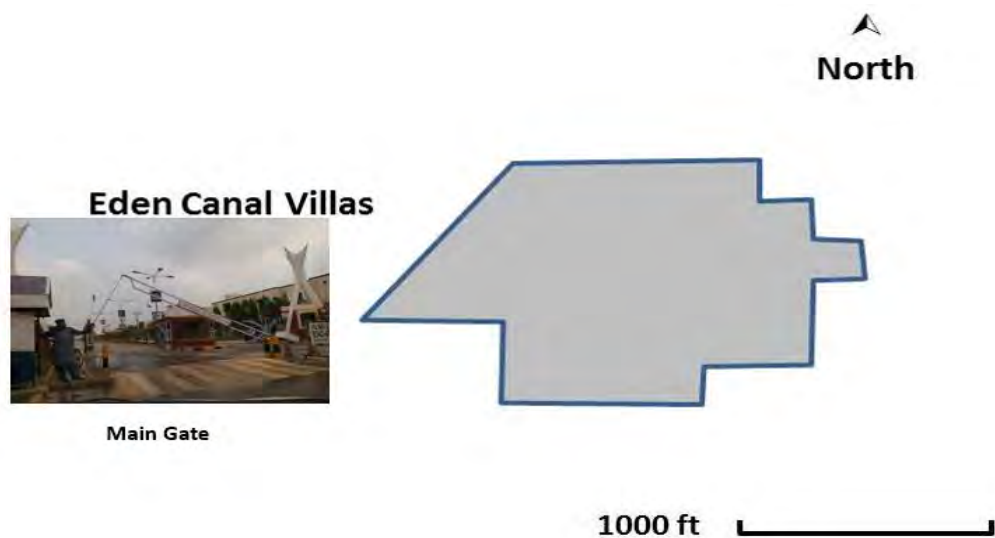


Figure 17. The figure is showing the sketched layout map of Eden Canal Villas and its Main gate. The main gate is the only gate available and is used for both entry and exit. (Sketched and picture taken by author)

Although, the site B in initial site sampling phase was identified as ‘permeable gated community’ because of its somewhat lenient policy to grant access to the

community. the physical permeability analysis of its layout plan shows that it is less physically permeable compared to site A as it has only one functional gate or one access point. The analysis revealed that permeability of physical markers not only depend on the fewer access points but also the efficient deployment of human and technological surveillance measures.

The data revealed that the phenomenon of gated home spaces offers people the opportunity to own a home in a secure spatial unit. Unlike non-gated residential areas, these home enclaves offer a territorially organized home space to its residents by putting up boundary walls, gates, barriers and human or technological surveillance system. All the residents of gated home spaces that are interviewed for this study migrated here from different open home spaces yet not a single resident expressed the desire of going back to non-gated communities.

It was assumed initially that the residents from community with permeable territorial physical markers (site B) would show some inclination towards their old residence but interestingly they expressed their desire to move to a more secure or territorially active home community. In the initial field inspection for site sampling, researcher recognized two variations in regard of Physical territorial markers, which are Active and Permeable. Regardless of the efficiency of Physical Markers (active and permeable), the mere deployment of these markers provides residents with the collective sense of safety, collective territorial control, collective identity, and sense of collective ownership.

Despite the fact that, the respondents who perceive that the permeability is common occurrence (inactiveness of territorial physical markers), they also kept the thought in their minds that in time of any disruption and unrest, they can make these

territorial markers functional (less permeable), which exactly happened during the recent pandemic of Covid-19. Although, it is not the part of this study, but researcher was in writing process of this thesis when our globe went into quarantine and interestingly it was observed that in researcher's own Gated community and other adjacent communities, the territorial physical markers made it quite easy for the management to turn these communities into smaller quarantine zones (Seanders & Maroofi, 2021; Hamama, 2020).

Moreover, residents living in gated communities where territorial markers are permeable (fewer restriction on entry of nonresidents) aspire to move in communities where territorial physical markers are more efficient. The results indicated that residents of active (restriction of nonresident's entry) and permeable (fluctuation of restriction) territorial markers expressed their satisfaction and associated sense of 'at homeness' with their gated home community. One male resident from site A (active physical markers) expressed it as:

'Certain issues arise here too but I am overall satisfied with this society. This is one of the best societies I ever lived in my entire life. Security is good here no one can enter without showing identity cards, even our relatives had to show their ID cards. I think it is best for everyone. When I was living in open community, I always had one side of mind at home because there was no security outside the house' (A08).

Comparison of two research sites surfaced that the geographical size of gated home community impacts the sense of home and safety. The site B for permeable territorial physical markers was geographically small sized community and the data revealed that residents were more closely tied together as compared to residents from

Site A which had active territorial markers but was geographically a large society. A female resident from site B expressed it in these words:

‘I moved here from Iqbal town and the day I came here people from society came to welcome us. Actually, this is a small society, so everybody knows one another. We gather together every week for Quran reciting, and I can recognize any stranger outside of home, as a matter of fact I investigated a man few days back who was roaming in the street and it turned out that he was a guest in one of the neighbors’ (B13).

Table 5

Functionality of territorial markers, geographical size, and sense of home.

Site	Functionality of Territorial physical markers	Geographical size	Approximate density	Perceived limit of Gated community as near home space
A	Active territorial physical markers	Large	2500-3000 household	Residential block as near home space
B	Permeable territorial physical markers	Small	250-300 households	Unified sense: whole society as near home space

Table 5. is showing the functionality of physical markers and sense of home across two gated research sites.

Also, it was observed in the field inspection and interactive participant observation of site B that with open front doors of houses, children were playing in the streets and playground freely. It usually happens in a tight knit community where people are familiar and acquainted on personal grounds with one another. Moreover, it could be analyzed that the perceived sense of near home territory was not only

based on the functionality of territorial physical markers but also on the geographical size of gated community. Site A, despite having active territorial physical markers was unable to provide the unified sense of collective home to its residents because of its large geographical size. One male interviewee said:

—Well, I don't really feel that I am home when I cross the gate my society but yes when I see the java restaurant sign near my block then I feel like I am almost home" (A21).

On the other hand, site B with permeable territorial physical markers is a significantly small society. In this site results revealed that residents projected a unified sense of collective home to their gated community. Geographically small community allows its residents to view the community as one collective home while being more familiar and helpful to each other. One male resident said:

—This is a small society. We all know one another by face. I go outside and I can tell you which person is resident here and which is stranger even guards know everyone by face... yes the moment I saw the sign of our society outside I feel like I am home because it's a small community you can visit the whole community in ten minutes" (B04).

Physical permeability (non-gated communities). To compare the physical permeability of gated site with non-gated sites, the layout maps of each non-gated site were obtained from internet source. Both non-gated sites are geographically large as DHA Lahore has twelve phases and Allama Iqbal Town has twenty-six blocks. To obtain a comparative picture of physical permeability from non-gated research sites, one block from each non-gated site was randomly picked (see full maps in appendix.

F). Layout map for each block was edited and major permeability points were identified and marked (see Figure 18 & 19).



Figure 18. The figure is showing the permeability points on layout map of Ravi block, Allama Iqal town. Source: redrealestate.com. (Edited and analyzed by author).



Figure 19. The figure is showing the permeability points on layout map of DHA Phase V, Block A. Source: redrealestate.com. (Edited and analyzed by author).

The comparative permeability analysis of non-gated research sites indicated that one block of Allama Iqbal Town has eighteen permeability points and one block of DHA Phase V, has fifteen permeability points. It was significantly surfaced that physical permeability of gated communities is far less than the physical permeability of non-gated communities. Hence, gated communities by offering physical markers (walls, gates, surveillance) turn the physical space into ‘less physically permeable environment’ which reduces unwanted public access and make the space exclusive to its residents (Nosheen, Mujeeb and Muzaffar, 2021).

Perceived permeability. (Gated communities) was identified by the resident's perception of the permeability of these Physical markers. Residents were asked about the potential access their gated community offers to outsiders. The analysis revealed the perceived permeability of these physical markers on three levels (see Table 5).

Table 6

Perceived Permeability Across two Gated Sites

Perceived permeability	Site A	Site B
No chance of permeability	13	07
Permeability as common occurrence	01	03
Permeability as rare occurrence	11	07

Table 6 showing No. of respondents on each perceived permeability level across two gated research sites.

The residents with perceived no permeability have the perception that physical markers are not permeable and are efficient enough to keep the outsiders from getting open access to the gated community while residents with permeability as common occurrence perceive that the physical markers are permeable and can be accessed by the outsiders without much difficulty.

The residents with permeability as rare occurrence tend to believe that physical markers are not permeable, but the possibility of occasional breach does exist. The permeability analysis of physical markers revealed that majority of respondents from gated communities believe that physical markers are less permeable

and very few (four respondents) tend to believe that physical markers can be breached easily by outsiders or intruders (Nosheen, Mujeeb and Muzaffar, 2021).

Perceived permeability (non-gated communities). The analysis revealed that the residents from non-gated communities are aware of the high permeability of their residential environment. Allama Iqbal town is a densely populated non gated residential area and to make space less permeable, it is a common practice here to install gates on both ends of street whereas such self-help measures to make a street less permeable are not much effective. All the residents interviewed from Allama Iqbal town expressed their dissatisfaction over these security measures as one resident said:

—There are gates on both ends of the street, and you know we even hired a watchman, but we still cannot be sure as who is entering the street. I don't trust the watchman and I have noticed that he lets everyone in and most of the time he is sleeping in his chair. I keep my home gate close at all times and don't allow children to play in street. This is just to satisfy the heart that oh! The gate and watchman are there for security, but in reality that's not the case". (C 02)

The trend of installing gate is common in Allama Iqbal town but the phenomenon does not exist in DHA. The reason is strict architectural rules by DHA (Defense Housing Authority). Residents are not allowed to make any spatial alterations without getting permission from DHA. DHA despite being non-gated residential area is a home for elite class who can afford personal security, yet it cannot be generalized among all phases of DHA as one resident explained it as:

—I am a native of DHA. I live in phase 1 the oldest phase of DHA. The people living in phase 1 and 2 are not from elite class. Majority of us are upper middle-class people and unlike residents of newly developed phases of DHA who usually are rich businessmen, we cannot afford personal security therefore people from new phases might give you a different opinion but I do believe that gated communities are more secure and organized.”

Another resident said:

—I am living here since last 26 years and if there is any robbery, we have to go to police station like people who live in other open residential areas (Mohala system), we cannot go to DHA management because they will again direct you to relevant police station so what's the point of going to this management. If you read newspaper the crime rate in DHA is very high. Everyday there is a news and that's not the case in gated communities, at least not in good gated communities like EME etc.”

The analysis revealed that participants from both non-gated sites believe that a well-managed gated residential environment is better than the non-gated one. Interestingly, the findings show that majority of participants interviewed from non-gated sites expressed their desire to move to a more managed gated residential area. Almost all the participants interviewed from site C (Allama Iqbal Town) expressed their intention to move to some gated community in future.

On the other hand, the residents interviewed from Site D (DHA) expressed mixed reactions to the inquiry of potential mobility to gated community. Four respondents despite acknowledging the fact that gated residential environment is more secure and organized, did not show the intention of moving to any gated community

in future (see table 7). They rather believed that this is DHA management's responsibility to provide security to its residents. All the residents interviewed from non-gated sites expressed their dissatisfaction over the high permeability of their residential area (Nosheen, Mujeeb and Muzaffar, 2021).

Table 7

Desire of mobility across two gated sites.

Non-Gated Sites	Desire to move to gated residential area	Dissatisfied but reluctant to move
C (Allama Iqbal Town)	06	01
D (DHA)	04	02

Table 7 showing No. of respondents in favor and against of mobility to gated residential area across two non-gated research sites.

Territorial physical markers as symbolic communicators. the analysis revealed that the territorial physical markers in gated home spaces serve as symbolic communicators.

Table 8

Theme of Physical Markers as Inward Symbolic Communicator and Relevant Codes

Physical Markers as Inward symbolic communicators	
Collective Ownership	Symbol of group ownership: <u>our</u> community‘ <u>our</u> club‘ <u>our</u> society‘
Collective spatial identity	Spatial Similarity: physical and social homogeneity Association: Affection and loyalty towards gated development
Collective spatial control	Walls, gates, and barriers make space less permeable which enhances collective spatial control

Table 8 showing the theme of physical markers as inward symbolic communicators along with relevant codes.

The Presence of these territorial physical markers not only sends territorial messages to its residents but also communicate territorial messages to the outsiders (nonresidents). Territorial physical markers significantly serve as inward symbolic communicators which facilitate residents of gated home community to establish and share a collective spatial identity and collective spatial ownership. The data surfaced two conceptual notions or components through which residents of gated home spaces develop collective spatial identity and ownership i.e., similarity and association which eventually forms territorial identity of gated communities.

Gated home spaces offer people a unanimous physical and social structure in turn maturing identification and association with respective community. One of the interviewees said:

–Similarity between all of us as residents made it easier for me to go out and meet with other members...by similarity I mean that we are financially and socially more or less similar like we belong to the same social class. I don't know if it's right or wrong to say but I think it's the advantage of gated communities that it brought the same kind of people in one place...” (A05).

Gated home spaces provide physical similarity as well by placing similar size plots in a row or block which practically clusters similar socioeconomic class in one place consequently designing similarity in an unconscious and definite manner. Almost all the residents usually are aware of their shared social, economic and spatial similarity and somehow, knowledge of this similarity helps them to develop territorial identity which reflects in words such as *‘our community’*, *‘our club’* or *‘our park’*. For instance, in one such case i.e., setting A which was a geographically large community, residents related themselves within their respective blocks and use reference as *‘J block’* or *‘B block committee meeting’* showing strong role of spatial and physical similarity within community.

The second component of territorial identity is an association which is interrelated with similarity residents have developed while sharing space with people around. The feeling of association is depicted in resident's verbal account of expression of affection (feelings towards gated community) and loyalty (Trust over community's spatial and social resources, willingness to stay in gated community) towards their residential community. One female interviewer expressed it as:

–Oh, if you ask me...I will say this is my favorite home. All the homes I have lived in this is the best...well the reason is we are small community, and we live like a family as you know Eden housing is small scale gated community. I think we have 250 houses so it's different than other large gated communities, so everyone knows everyone here....” (B02).

On the other hand, territorial physical markers as outward symbolic communicators announce territorial messages to the outsider (non-residents) that this place is private property and defended collective home space which is exclusive to its residents.

Table 9

Theme of physical markers as outward symbolic communicator and relevant codes

Physical Markers as Outward symbolic communicators	
Collective private property	Signature monument of Gated community Community's name Board Warning signs for outsiders Separate entry lanes for residents and non-residents
Defended space	Boundary wall, Gate, and barriers send message to outsiders that <u>it's</u> a defended space'

Table 9 showing the theme of physical markers as outward symbolic communicators along with relevant codes.

Finally, Territorial Physical markers also serve as symbolic communicators' (inward/ outward) to express collective spatial identity, collective spatial ownership, defended space and territorial control. The gated residential developments by putting up walls, gates and other territorial strategies provide residents with certain collective

environmental cues. These symbolic cues not only spread message of collective private property but also provide residents with the sense of collective ownership.

Available Spatial Resources

The available spatial resources in two gated communities were identified through voluntary photography. Three types of spatial resources were identified: 1) spatial resources (Recreational) 2) Spatial resources (Religious activities), and 3) spatial resources (Everyday enmities). The pictorial data will be presented in this section and the functionality of these identified spatial resources will be discussed in the section of functional ease.

Spatial resources (Recreational).

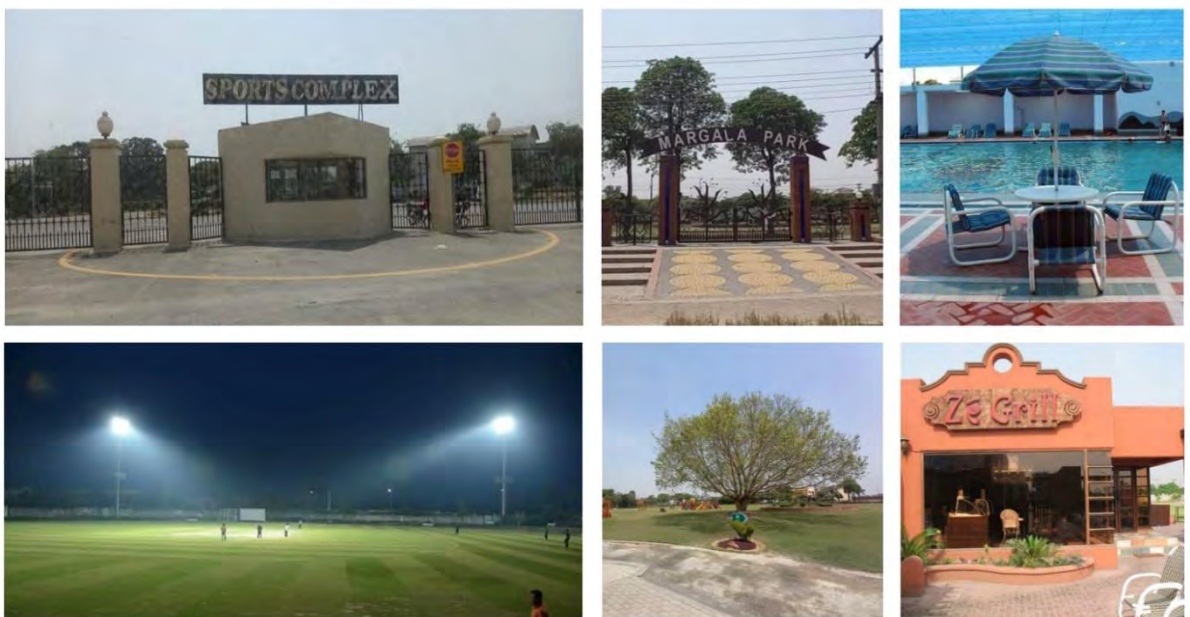


Figure 20. Pictures compilation showing multiple recreational areas at EME i.e., sports complex, children's park, Swimming pool, and cricket stadium and eateries.



Figure 21. Pictures compilation showing multiple recreational areas at Eden canal villas i.e., Theater for social gatherings, children's park, and tennis court.

Spatial resources (religious activities).



Figure 22. Pictures compilation showing the main mosque at EME.



Figure 23. Pictures compilation showing the only mosque in Eden and plot allocated for graveyard.

Spatial Resources (Every-Day Enmities)



Figure 24. Pictures compilation showing the market areas, banks, Hospital and school located in EME.



Figure 25. Pictures compilation showing the small library, dispensary and welfare office in Eden canal villas.

Local Code of Living

The analysis revealed that the gated residential areas tend to adhere to local code of living. To make residents know that what behavior is acceptable in a spatial resource and which is not, the signs and instructions can be seen in both research sites which tends to be helpful for residents in order to get geographical directions, measuring commute time and awareness of various facilitating physical markers. Moreover, policies and instructions to be followed by residents are clearly written in local language over multiple boards at different intervals and places.



Figure 26. Pictures compilation showing the instructions on gate of EME park, sign boards in EME (Source author), each blocks map is available in EME, traffic stop sign at the corner of EME school area (fine is applicable for over speeding within gated community in order to avoid accidents and make space safe for residents).



Figure 27. Pictures compilation showing the instructions Picture Instruction board at the gate, board presenting rules of society (source author), and Eden main park instructions.

Functional Ease

The second category that the present analysis manifested is functional ease. Functional ease is defined as the degree to which a residential community allows its residents to use the available spatial, social and legislative resources within comfortable and organized fashion. Availability and accessibility of these resources to residents is determined by functionality i.e., usability of such resources.

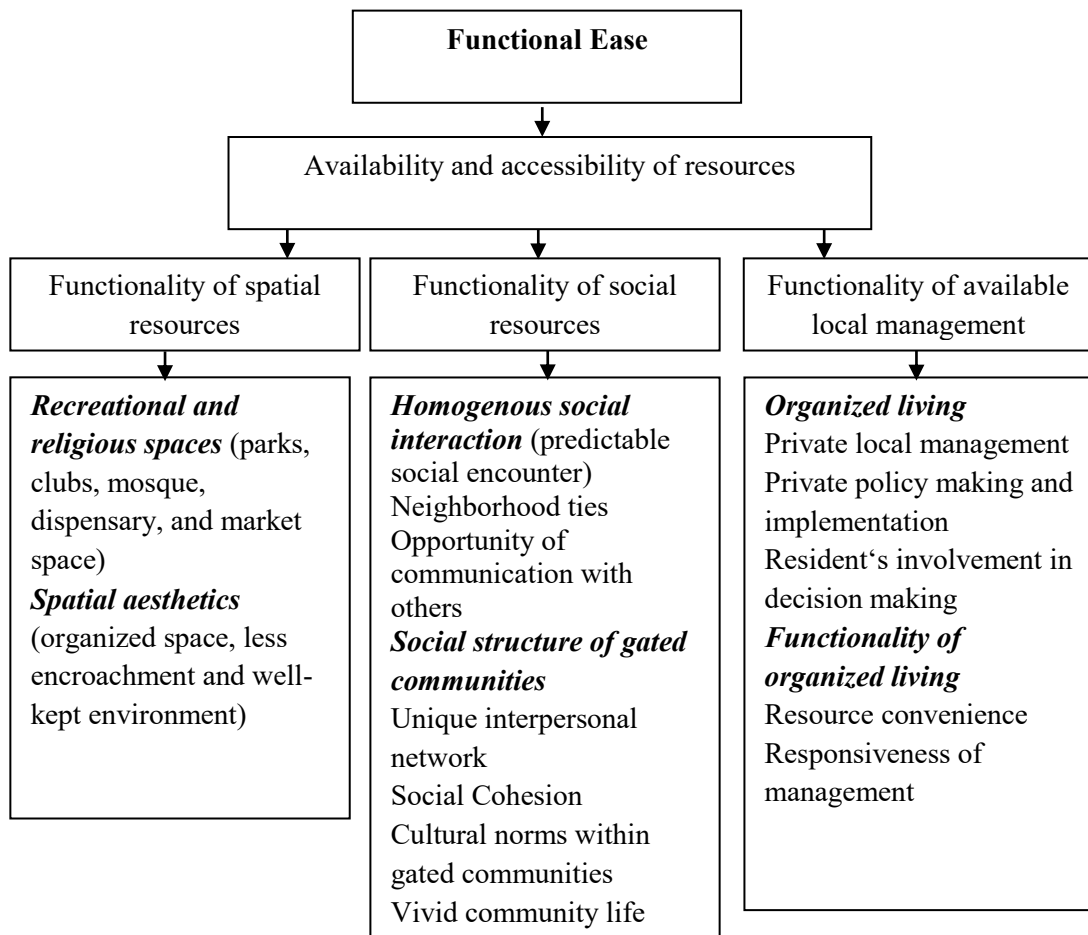


Figure 28. Showing the category of functional ease along with subcategory and focused codes.

Functionality of spatial resources.

Spatial resources. The analysis showed that spatial resources like recreational and other spaces provided by gated residential communities not only interest people to move into these communities but also encourages them to settle in these living spaces for longer period of time.

The consistent availability and quality of these spatial resources help residents to establish territorial behaviors such as visiting parks and other recreational places,

attending resident's club meetings and shopping from available markets and shops.

While talking about these spatial resources one resident from site A said:

—Look one of the reasons people are moving to gated communities is that this living arrangement is offering people kind of a package deal... everything available at one place, like every block has mosque, gym is available, a small market is here, and parks are pretty good for children and women... even two years back Lahore grammar school branch opened within society so now you don't even have to worry about children's early education..." (A,15)

Another elderly resident of Site A said:

—Yes, mosque is on walking distance and I regularly visit it to offer prayers and in the morning I go for walk although park is available in every block, but I prefer my morning walk on sidewalk. You can see that sidewalk is little bit higher than road so it's safe although in morning very few vehicles are on road but still..."(A,05)

Interestingly, all the interviewers from gated residential developments verbalized their comfort over the presence and availability of these resources within their community. Three types of available spatial resources have been identified and discussed in physical ease category: recreational spatial resources, spatial resources for religious activities and spatial resources for everyday enmities. Although, these three types of spatial resources are present in both gated sites, but it is apparent from the analysis in previous section that site A being a geographically large community offers large scale spatial resources to its residents compared to site B.

The functionality of the spatial resources is defined by the ‘accessibility’ and ‘utilization’ of these resources. The data revealed the three levels of accessibility of spatial resources within gated communities (see Table 10 & 11).

Table 10

Accessibility of spatial resources

Accessibility level	Spatial Resources (Site A)	Spatial Resources (Site B)
Full Accessibility	Children’s parks	Children’s parks
	Jogging tracks	Jogging tracks
	Side walks	Side walks
	Mosques (Available in each block)	Mosque (one mosque for whole community)
	Hospital & Dispensary	Dispensary
	Market area	Market area
	Restaurants	Water plant
Restricted Accessibility	Main ground	Open Air Theater
Paid Accessibility	Sports complex	Graveyard
	Graveyard	

Table 10 showing the level of accessibility of spatial resources across two gated research sites.

Spatial resources with full accessibility are the ones that are commonly available to all residents without any restriction. Spatial resources with restricted accessibility are the ones that are available to residents but to access those resources residents must get permission from the management. A main ground is available in site A (EME) and residents can conduct ceremonies there (e.g., wedding functions, parties, and Milad (Birthday celebration of Prophet PBUH etc.)).

To conduct these activities residents are required to get permission from the management. Same is the situation to use ‘open air theater’ (especially designed for functions in Eden) in Site B. Finally, site A (EME) has a well-established sports complex that offers multiple recreational resources (e.g., swimming pool, squash and tennis courts, cricket stadium, restaurant etc.). this is kind of a club house that is available to EME residents but only those residents who get yearly paid membership. On both sites, graveyard areas are available, and residents can get paid access in unfortunate times.

The analysis also surfaced the utility of these spatial resources. The participants interviewed from two research sites were asked ‘how often they use available spatial resources?’. The utilization of spatial resources is presented in table 11.

Table 11

Utilization of spatial resources

Site	Occasionally	Rarely	Frequently	Daily
A (25 participants)	04	02	07	12
B (17 participants)	02	05	04	06

Table 11 showing the utilization of spatial resources across participants of two gated research sites.

Occasionally and rarely are participants who are either full time students or people with busy schedules. Frequently and daily utilization is from housewives and

elderly people. Another bright side to it is for children i.e., their parents or care takers can easily take them to parks with liberty of secure environment while providing healthy activity time to children. Moreover, young males usually who are fitness freak or children who like playing football or cricket can enjoy the facility of separate stadiums which provides disciplined way of playing games as well as leisure time spending. One of the housewives said:

–My son really like football so he along with his friends from the neighborhood has fixed the time usually during winters or spring... along evenings, to play together which is quite satisfying for me as a mother as well because instead of spending time over video games or mobiles, at least he is physically moving keeping him fit and fresh”.

Spatial resources in non-gated communities. comparative data for spatial resources in non-gated sites were gathered from the interviews of participants from these sites. Although, the three types of spatial resources identified for gated sites are also available in non-gated communities as well but, spatial resources in non-gated sites are not for exclusive use of its residents rather they are public resources. Residents of non-gated sites expressed rather detached (non-privileged) approach towards the access and utilization of the spatial resources.

The comparative analysis revealed a conceptual notion of ‘being served or being given’. The residents of gated communities perceive that the spatial resources within their community are there to serve them and they express the feeling of privilege over these resources. Contrary to this notion the analysis of the account of residents of non-gated communities revealed a bit detached and non-privileged

attitude towards the available spatial resources within their residential community (see Table 12).

Table 12

Conceptual notion of being served and being given

1. Being served (Gated Resident)	Privileged Attitude	Residents as primary or exclusive users of spatial resources	Facilities are there to exclusively serve the resident's everyday needs.
2. Being given (Non-gated Resident)	Non-privileged Attitude	Residents are common users of spatial resources, but general public can use resources as well	Facilities are provided for the common use of residents but are not exclusive to residents only.

Table 12 showing the conceptual notion of being served and being given along with emergent themes for the notion.

The analysis also showed that although everyday enmities are available in abundance in both non-gated sites, the resident's general attitude towards these facilities were not privileged one. One male resident from DHA expressed it as:

–Well, you know DHA has expanded a lot, it's like a city within a city like Bahira Town. DHA has given a lot of facilities like y block market, commercial area and now Package's mall is functional since last few years as well, but of course it's not only for DHA residents, but everyone can also use it.” (D,03)

A female resident from Allama Iqbal town expressed the similar feelings:

—This area is in middle of Lahore and over the years the main road has literally turned into a market and food hub. Although it creates a lot of traffic jam issues due to encroachment and public access to it but still, I think it's good that every day facilities are nearby. my husband usually use this market to buy food and groceries and I prefer going to Liberty Market or Fortress for shopping where everything is available in one place'. (C, 06)

The data revealed that the residents from both non-gated sites have the realization that the spatial resources are not exclusively theirs, rather they are public, and this perception led to their non-privileged attitudes towards these resources. Interestingly, residents from DHA somehow do perceive spatial resources within their boundary as theirs, since their attachment with the label DHA is quite strong which empowers them to outgroup non-DHA residents in a very unconscious yet definite manner. On the contrary, ownership of residents from people of Allama Iqbal Town is quite less since that area is geographically more expanded and publicly accessible while putting less influence on the minds of residents in the form of physical or psychological security.

One male DHA residents expressed the privileged attitude over being a resident of one of the elite communities in city in the following manner:

—Yes, it's true that we are not living in gated community but as you know DHA is the most expensive residential area in Lahore. Everyone wants to buy home

here despite it being non gated. Well, you can say that buying house here is a good investment. You see one can't get everything ". (D, 01).

One female resident from Allama Iqbal town expressed the non-privileged detached attitude:

—You know when we moved here 30 years ago this was the best area in Lahore, but now it has become very congested and unsafe, we can't park car outside. I don't want to move because I spent my whole life here, but I have to. My sons have bought plots in EME and when we will have enough money for construction, they will surely start building the house and we will move there eventually." (C, 01)

Spatial aesthetics. is the second theme that present analysis generated. Gated home communities usually attract people by offering aesthetically pleasing living environment like aesthetically designed and secure parks, clubs, mosques, market area, sidewalks and advanced trash disposal system. Furthermore, residents are bound to get approval for their home construction from the management and it reduces the chances of encroachment in present or in future. Stressing on this aspect one male resident said:

—We lived in Iqbal Town for almost twenty years and when we settled there it was considered a posh area of Lahore. Roads were clean and wide, but you know what happened after few years is that roads got narrowed because of encroachment and over population. Even parking my car became an issue there...it was not safe on the road every day I used to find new scratch on it

because of encroachment. That area turned into commercial area and I even filed complained to local management but no action was taken so finally we decided to move here. You know I am living here since last eight years, but I don't see any encroachment just because the management keeps an eye on it and does not allow such actions..." (A, 08)

The analysis further exhibited that crowded and untidy living arrangement makes people psychologically uncomfortable, and they start searching for new living set ups. Interviewees who shifted in GRCs from other open areas of Lahore specifically stressed on the aesthetic features of gated living. The organized way of living those gated developments offer somewhere assure that the spatial decline of gated living will not happen as they had seen in open living areas.

Gated communities while following strict policies and instructions, along with established modern urban development design offers spatial aesthetics in a very definite manner i.e. properly organized clubs, communities, parks within blocks etc. which indirectly gives confirmation to the potential residents that damage of all these will be minimum since spatial aesthetics is one of the key significant factors which modern gated communities sell.

Functionality of social resources. Within the category of functionality of social resources two themes have been identified i.e., social interaction and social setting. The two thematic categories are interrelated as social interaction depends on the social settings provided by gated residential communities.

The gated residential communities furnish people an opportunity of homogeneous social interaction i.e., people belonging to a particular socioeconomic class, for example, SEC A or B, to share similar patterns and spatial environment. A male participant explained it while saying:

—Well in old areas as you know that every type of people and people from different statuses used to live in the same street, a two kanal house could be adjacent to two marla house and people were living there because that was the trend...and you know nobody was bothered everyone knew one another but when people got the chance in form of gated communities to share living with similar kind of people, they took the opportunity, and I don't see anything wrong in it. Its new trending living..." (A,20)

The analysis further showed that people in general are inclined towards better living style than their present socio-economic status and living style while anticipating any upgradation opportunity. Almost all the residents interviewed from gated sites shared that they shifted in these communities from different open communities of Lahore and verbalized experiences of their living manner in a comparative way i.e., constantly drawing differences between previous residence and the present one. Residents of gated residential communities see homogeneous social environment as a reward in a quite evident mode.

People deem it greatly acceptable and engrossing if any social setting is facilitating predictable social interaction while decreasing unwanted social encounters. Predictable social encounters in gated developments not only help in establishing neighborhood ties but it also gives residents a sense of intact community

and belongingness consequently limiting the social interaction among other social classes. Moreover, social conditions within gated residential community produce unique interpersonal network (initiation of group formation, religious gatherings, and self-established groups) which facilitate social cohesion and the cultivation of locally embedded culture. While describing the social interaction within GRCs a female interviewer said:

—Women committee in every block is different. I go to J Block committee because I live in J block. Because EME is very large society so every block has its own committee. It's just an excuse to plan some get together and a chance to know other neighbors. But when I recently shifted here, I did not bother to go because I was not habitual of meeting neighbors even in my old residence but one day a lady from my neighbor came and specially invited me, so I went. Every month we arrange a Dars e Quran and it gives chance to meet one another and discuss different issues...” (A, 12)

Another female resident described it as:

—You know there are some benefits to go to community's gatherings as many parents found a match for their children within the community because we are all similar status people, even a lady has made a WhatsApp group for residents to upload profile of their children for marriage so yes meeting with our kind of people resolve some issues.”(B, 10)

Integrative analysis data from interviews and interactive participant observation displayed that GRCs provide an opportunity to its residents to develop

their own unique locally embedded culture. Imperative to notice that resident who withdraw themselves from social gatherings are quite aware that these social benefits are available, and they can avail it at any time as one male resident described his experience:

—Our household is one of the earliest households that shifted in this community. I guess we shifted here in 1995 and I remember that even the main canal road was not built. But we had very good relations because there were few households and I was actively involved in resident's committee and now this society has overcrowded and I don't think management listen to me as it used to listen in earlier time”(A, 21)

The data from non-gated communities revealed that the non-gated communities are more heterogenous in nature. People from different classes and SEC reside in both sites. Compared to gated research sites, data revealed that this social heterogeneity hinders the social interaction among residents of non-gated communities (see Figure 7). One female resident expressed it in the following words:

—This street has ten Marla houses, but many hoses are occupied by renters as the owners have moved to better area. And most of the time people don't rent the whole hose but a portion of it, and in one house in our lane the owner has rented it to bachelors. I guess they share room, some of them are students or some are factory workers. So, we don't know what type of people are living next door, so I avoid social interactions”. (C, 02)

Residents from non-gated communities believe that unneighborly relations have declined over the years. As one old resident from site C said:

—When we moved here almost three decades ago, we knew all our neighbors. We used to go to one another's homes all the time but now situation is different. Gradually over the years many old residents have moved to better communities. My in laws family had four houses in the next block they all have moved and new commers are strangers and I guess people now a days don't like to go to neighbors houses so everyone stays at their homes" (C, 01)

Whereas, in elite non-gated communities like DHA relationships with neighbors are quite rare since people are usually unbothered about whatever is happening next door unless and until they find any act coming from neighbors as impeachment of privacy. The traditional way of inviting neighbors on family gatherings, women having get togethers or children playing together is quite in evident. On a maximum level, it can be seen that housewives while labelling it as fashion or modern trend arrange kitty parties which comprises of lunches or hi-teas, otherwise neighbors being a helping hand in a time of need is vanishing over the last decades. One of the interviews from DHA shared that:

—New neighbors came to our street across the road few months ago and they used to keep sitting outside their house over the footpath or over the chairs they have kept on the street, it was very irritating to watch and since here we usually do not intrude int each other's matters, so I called DHA security and talked about it and asked them to come and talk to this man because his persistent presence on the road is bothering our free movement outside."

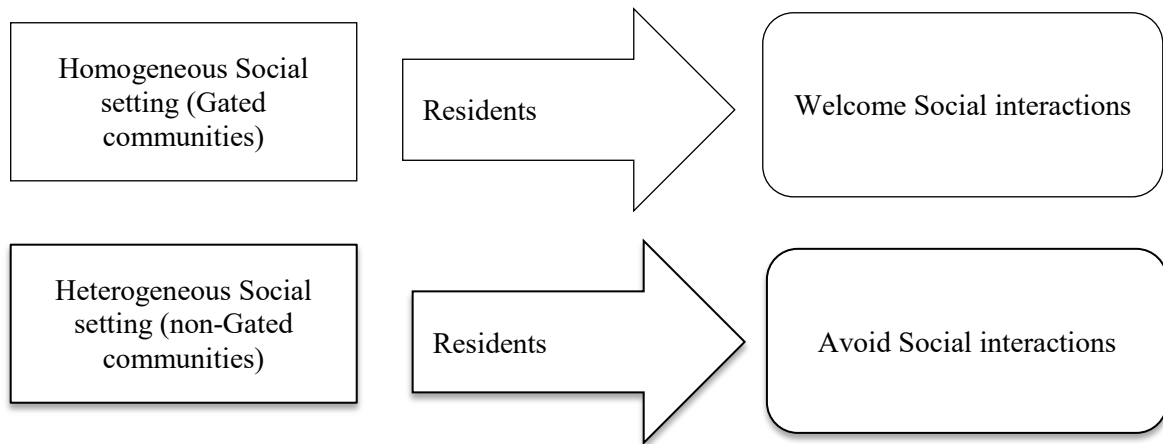


Figure 29. Showing the comparative social setting and social interaction across gated and non-gated research sites.

Functionality of local management. The final theme within the category of functional ease is the functionality and operational capacity of local management. Gated residential communities have made living organized, structured and bureaucratic by providing local management system in return offering residents a safe harbor of reliance during times of needed assistance. Presence of local management designs codes, rules and regulations in the respective community while efficacy of local management in terms of establishing spatial resources tends to put impacts in

two ways i.e. reputation of respective community among the general population and comfort level of residents.

People move to these organized living environments for resource convenience which is provided by any community's management. In the present analysis, resource convenience means the availability of household necessities (e.g., electricity, gas and water supply along with the availability and maintenance of recreational and other public spaces). Residents of Gated developments perceive local management as a positive entity which not only delivers different amenities but also responsible for managing and sustaining the spatial resources within gated community. The analysis further showed that the presence of managerial organization and discipline creates the sense of 'shared responsibility' among residents, one male interviewee explained it as:

—You are right people have quickly moved to these communities and the reasons are quite evident firstly these societies are offering people unified planned living and secondly the management has shared many household responsibilities, for example you don't have to run after lazy govt. servants if your electricity meter is broken or something, you simply register complain to society's office and take care of it.”(B, 03)

A female resident from site A said:

—Of course Management is important, whenever we go on vacations, we inform the management so they can appoint a guard to keep an eye on our

property and it's a big relief that someone is there to look after your home"
(A, 22)

The management of both gated sites include selected residents in decision making processes usually in a manner that elections are held within respective communities where residents are selected as general voice of the community. The data from gated sites revealed that participants from both communities generally perceive management in the following notions: *positive entity*, *someone to look up to*, *important to keep order within community* and *someone to work for collective benefit*. On the other hand, data from non-gated research sites revealed an overall negative perception of residents towards management. In Allama Iqbal town Local Mohala committees are common but none of the residents can put trust on them for any positive work process.

—Oh, what management? No one takes responsibility here. These committees are there even an office is allocated to them in each block, but no one sits there. You can go and check. My electricity meter caught fire while I was in office and my wife tried to contact mohala committee, but no one was present in office, so she called me, and I had to go to LESCO office". (C,04)

The situation in DHA is relatively different. DHA (defense housing authority) manages DHA without any participation of residents. Participants interviewed from DHA expressed general dissatisfaction over the management. As one male resident said:

–Yes, we can go to DHA office to file complain but they take too much time to resolve any issue, so I find it better to be self-sufficient and resolve it myself”.

(D, 08)

Another resident said:

–DHA does not listen to the residents. I mean residents have no representation in management. Street crimes are very common in DHA and we did submit application to increase security of our block but there was no reply or action”.

(D, 10)

Another woman quoted that:

–Though we keep watching patrolling cars and bikes, yet crimes are still happening and maximum DHA management do is refer us to respective police station while none of the cases have been in the past been resolved by management themselves.”

Psychological Ease

Psychological ease for this dissertation is defined as the state of ease the individual resident (situated person) experiences while living in situated environment i.e., gated or non-gated communities. The category of psychological ease contains four sub-categories: sense of ownership, sense of belongingness, sense of control and sense of home.

Sense of ownership. The sense of ownership comes when one believes that something belongs to one in true manner while establishing personal identification.

The analysis revealed that residents of gated developments develop a sense of ownership by maintaining territorial identity (individual & collective) and by responding to the community's personalization efforts.

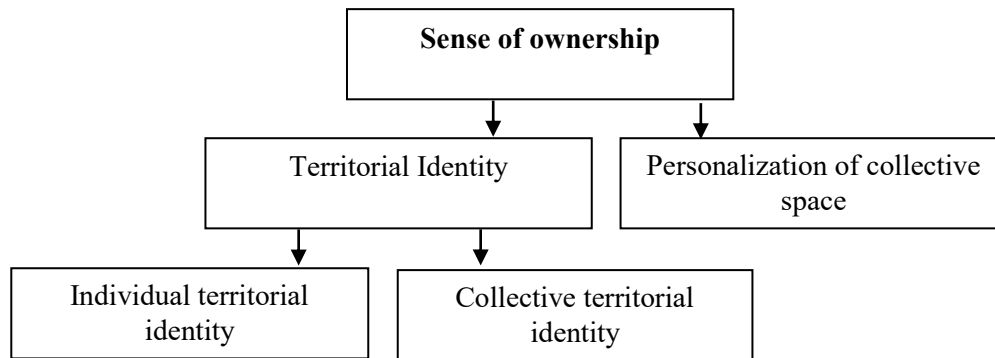


Figure 30. Showing the subcategory of sense of ownership along with related focused codes

Identity makes us unique (personal identity) and also similar to other people (social identity) (Hauge, 2007). With respect to dwelling unit, one needs both i.e., personal, and social identity. Finding the similarity and association with dwelling and that too which is providing perceived and needed basic requirements of life, people living in that space eventually evolve territorial identity encompassing personal and social identity. The data revealed following two components that form territorial identity (similarity and association):

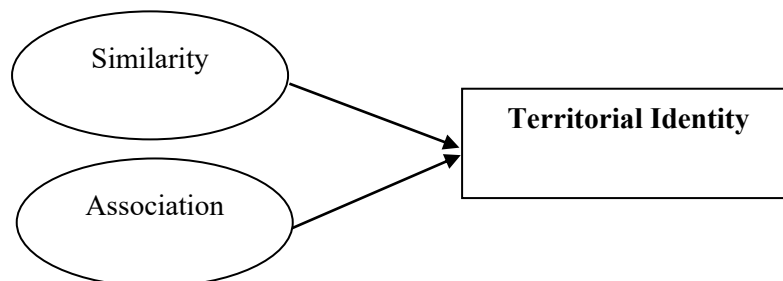


Figure 31. Showing the process of territorial identity for residents of gated residential developments.

Gated residential developments offer people a unanimous physical and social structure in turn maturing identification and association with respective community.

—We are somewhere aware that whoever is living around is somewhat from the same SEC therefore sharing similar values and traditions as well which actually gives us ease to socialize and getting connected with people within same vicinity (A, 03)

Gated communities provide physical similarity as well by placing similar size plots in a row or block which practically clusters similar socioeconomic class in one place consequently designing similarity in an unconscious and definite manner. Almost all the residents are usually aware of their social, economic, and spatial similarity that they share and somehow knowledge of this similarity helps them to develop territorial identity which reflects in words such as our community', our club' or our park'. For instance, in one such case i.e., setting A which was a geographically large community, residents related themselves within their respective blocks and use reference as Jblock or B block committee meeting'.

The second component of territorial identity is an association which is interrelated with similarity residents have developed while sharing space with people around. The feeling of association is depicted in resident's verbal account of expression of affection (feelings towards gated community) and loyalty (Trust over community's spatial and social resources, willingness to stay in gated community) towards their residential community. One female interviewer expressed it as:

—Oh, if you ask me.... I will say this is my favorite home. All the homes I live in this is the best...well the reason is we are small community, and we live like a family as you know Eden housing is small scale gated community, I think we have 250 houses so it's different than other large gated communities, so everyone knows everyone here....” (B, 02)

A male interviewee said:

—Yes, I know there are other gated communities and I heard that they are very good too but I am happy here...” (A, 15)

Gated residential environment provide individuals a place to identify with, it serves as a place of reference that help residents to establish both individual identity (by expressing lifestyle, living status, personal residential preferences) and collective identity (expressed in group or community affiliation and common experiences within gated community). The analysis further depicted that the Gated communities provide opportunity to individuals to construct and reconstruct identity by choosing residential environment which is incongruent to their perceived self-image and self-representation. People tend or aspire to move to other residential communities that they consider more suitable for their sense of selves.

A resident described it as:

—I had a house in Muhafiz town, it's on five minutes' drive from here and you know it's also a gated community, but it was not well organized. I loved the architecture of my house because me and my husband put a lot of effort to build it according to our needs and I did not want to leave it... You know we

had no control outside our house, and I had no clue who was living next door. Home servants used to sit on green belt adjacent to my house so I refrained my children from going out... My husband already had a plot in EME so we decided to build the same house here...you know if you visit my both houses you will see that they are architecturally the same..” (A, 09)

The data on territorial identity showed that people, when resources are available, tend to aspire to settle in places that are congruent to their perceived self-image and social standing. The data from non-gated communities confirmed this notion as majority of participants interviewed expressed their desire to move to a well-organized gated community (especially Participants from Site C, Allama Iqbal Town).

Sense of belongingness. Attachment to places is an effective, proximity maintaining bond which generally leads to increased relatability to respective places. Present analysis pertinently manifested that the residents of gated residential communities tend to develop certain level of attachment to their residential setting. Territorial attachment is manifested in resident’s ability to relate to other residents including community members as well as the physical environment of Gated development. Analysis showed that the territorial attachment has two themes i.e., attachment to physical setting and attachment to social setting of gated residential community.

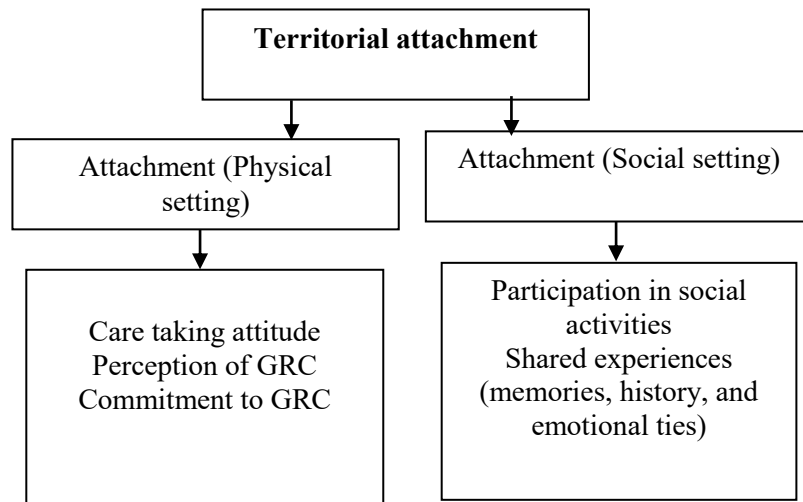


Figure 32. Showing the subcategory of sense of territorial attachment along with related focused codes

Territorial attachment makes residents view their Gated communities as –extended home territory –and help residents to develop positive association towards their residential environment.

Attachment to physical settings is exhibited in care taking attitudes, perception of place and commitment to place. The data on care taking attitudes significantly showed that residents with positive attachment to GRC tend to care more about the shared spaces available in gated community; for example, registering complain about the untidy parks or sidewalks or verbalizing concern over the lack of speed breakers on their block or street or showing concern over broken slides for children. Generally, residents care taking attitudes can be classified into two categories i.e., care taking attitude for inside home space and care taking attitude for outside home space.

While providing people an organized living, gated residential communities, liberates its residents from undertaking few mandatory community chores such as garbage collection, street cleaning, gardening, equipment, and amenities upkeep. In Gated home communities, it is quite unusual to find any such case where residents need to get directly involved in such maintenance activities.

Even within the home the responsibility of taking care of inside home spaces is shared. Residents make maintenance calls not only for outside home spaces but also for their individual homes. While living in gated development residents get the privilege of various maintenance personnel on their doorsteps like, Gardner, plumber, carpenter, domestic servants including arrival of security force in case of any threat. Such benefits consequently furnish mental peace to residents making their lives easier.

Resident's care taking attitude for both inside and outside home spaces is dependent on the responsiveness of gated community management in a noteworthy manner. Residents who perceive that management lack responsiveness tends to exhibit less responsible actions of care towards community and refrains from registering complaints. On the other hand, residents who perceive management as efficient entity or believe in the notion of 'our community' usually show strong caring and responsible attitude.

One male resident described it as:

—I was the part of previous management and it was very proactive, but this management is weak. I had to complain three times to get their attention to an

open gutter outside the park, I go for a morning walk...it was outside the main park I could have simply ignored it but I thought someone can slip over it or any child can fall into it ...now I try to keep my eyes shut...” (A,14)

The data on care taking attitude also revealed that everyday use of different facilities within gated community effect resident's care taking attitude as well. Residents who frequently use facilities like, going to the park, visiting mosque or visiting other recreational places tend to show more concern and care towards those places.

Perception of residential community is the second theme that affects resident's attachment to their physical environment of GRC. Residents who perceive their gated development as high status and prestige one in comparison to other adjacent gated communities, express more sentiments of attachment. As one female resident said:

—You know our community is role model community...everyone wants to shift here...you know the bank outside... the one on main road... did you notice that it is quite far away from our community but the call it EME branch despite the fact that its more close to Muhafiz town...that's because everyone knows about EME...” (A, 22)

Positive perception of gated community makes residents take pride in their living environment and it also inculcate the sense of privileged living and sense of exclusiveness. The data revealed that the residents of both gated research sites expressed the perception of their respective gated community under two notions: Residents from EME (site A) are prideful of their community, in a more rational

manner as compared to the residents of Eden Canal Villas (Site B) expressed their perception in a more intimate (affective) manner (see Table 13)

Table 13

Perception of gated community and selected verbatim

Perception of Gated community	Selected verbatim
EME	➤ <u>“This is a Role model Community”</u>
Rational (Grandiose and proud)	<ul style="list-style-type: none"> ➤ <u>“This is the only gated community in Lahore that offers maximum facilities”</u> ➤ <u>“Everyone knows that EME has set the bar for other gated communities”</u> ➤ <u>“I am a proud and one of the oldest residents of EME”</u> ➤ <u>“No gated community in Lahore can match the well-established security system of EME”</u> <ul style="list-style-type: none"> ➤ <u>“Facilities wise best society I lived in”</u>
Eden	➤ <u>“This is small but wholesome community”</u>
Affective (Humble and sentimental)	<ul style="list-style-type: none"> ➤ <u>“We are small community, but benefit is we all know one another”</u> ➤ <u>“I love the fact that it’s not big and crowded like other communities”</u> ➤ <u>“Yes, parks and roads are small, but it avoids accidents”</u> ➤ <u>“I love that I can visit my society from one end to another in ten minutes”</u>

Table 13 showing the rational vs. affective perception of two gated research sites among its residents.

Commitment to residential community is the third theme that is linked with the resident's perception of residential community. Commitment to living environment manifested in resident's account of trust on their living environment and in their view of gated community as 'long term residence'. The analysis surfaced that human beings usually trust their environment only when they believe it can provide them with all the necessary resources for a quality living. Residents with positive perception of their gated living express higher level of trust ability over their living arrangement; hence, view their gated development as long-term residence.

The data showed that most residents from Site A (EME) expressed their trust and commitment to their gated residential community. Site A i.e., EME provides significant benefits like availability of security force throughout the day and night leading to sense of protection in residents unlike Site C i.e., Allama Iqbal Town and Site D i.e., DHA where safety measures for communities are relatively low or nonexistent. In general, few people showed desire to move to DHA for living and that too while having their own security guards and processes.

Moreover, gated communities offer another set of advantages pertinent to social and moral security of families. Be it children or women, reliability of moving freely is quite high as compared to non-gated communities. Parks designed in each block let females and children to spend their time in a protected manner where fear of immoral activities and security threat is quite low, therefore, creating a homogenous, friendly, and secure environment. One female resident from Site B said:

—We are small society, and you know I see it as a good thing because unlike big societies of EME here most of us recognize on another. Even guards know

which child belongs to which household, this is the reason that we let our children go to park or play in the street without supervision. it's a relief you know" (B, 11)

Compared to this the data from non-gated sites revealed completely opposite results. Residents from both non-gated sites reported that they perceive no control outside the boundary of their household. Even the residents of DHA reported that they prefer not to go for walk in the evening as one male resident said:

—I have been living in DHA since last fourteen years and I go to gym very regularly and DHA has many good gyms, but I cannot jog on the sidewalk of my street especially not after dark... street crimes are high here... anyone can come on bike and snatch your mobile. This has happened with me before..." (D, 04)

From site B (Eden canal villas) six out of seventeen participants expressed their desire to move, interestingly, not because of their lack of trust over resources but in order to achieve high status and living environment with more resources and facilities they perceive EME or Bahria is providing. Site B i.e., Eden is generally accepted as a community for SEC B while being designed in small geographical sphere with less access to everyday life resources and benefits.

The data from non-gated sites, specifically from Allama Iqbal Town also confirmed the above-mentioned data i.e., areas are getting incredibly crowded with each passing day which not only hinders their mobility to perform everyday tasks but also put their families at risk as well over street crimes, harassment, inability to

socialize freely etc. On the contrary, residents from DHA shared security as one of the most highlighted factors of botheration while living in non-gated community, other than that they usually do not face issues over basic managerial organization, polices and regulations or intrusion of privacy.

Territorial attachment social setting. On the whole data revealed that Territorial attachment (social settings) facilitates social ties among residents (relation with neighbors, formation of community groups, shared social events and activities) and social support (affection, warmth, and comfort). Gated residential environment serves as a stage where individuals cultivate these social bonding in an organized and structured social setting. The findings of social setting are the same that have been described in the section of functionality of social resources.

Sense of control. The sense of control for this dissertation is defined by the resident's sense of perceived territorial control and perceived territorial rights.

Perceived territorial control makes individual resident to either engage or withdraw from spatial resources provided within residential environment.

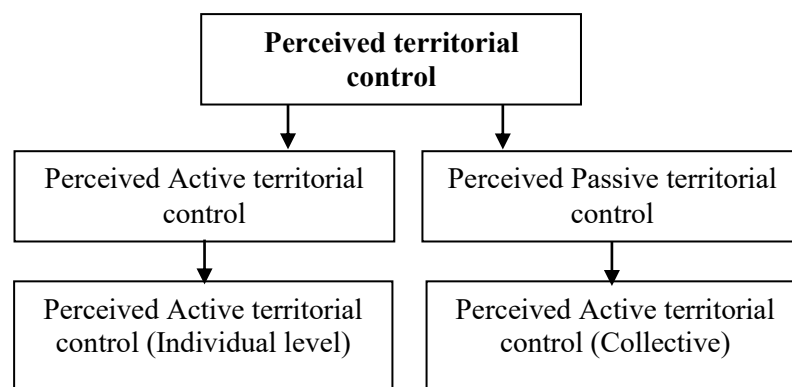


Figure 33. Showing the subcategory of perceived territorial control along with relevant themes.

Perceived active territorial control. It provides residents with sense of freedom and sense of privilege to engage in utilizing, manipulating and managing these spatial resources (e.g., using community clubs, parks, sidewalks, religious places and attaining membership of local resident's committees, clubs and other facilities). The data revealed that residents with perceived active control tend to exert control in a more direct manner. For example, they directly intervene if they witness any uncivil behavior or suspicious activity (approaching the situation directly and investigating about it). The data revealed two themes of this direct approach: perceived active control at personal level and perceived active control at managerial level.

Perceived active control (individual level). individuals with perceived active control view themselves as an active agent in environments and believe that they are free to operate on their environment (gated community) directly, as one female resident responded what would you do if you see suspicious stranger or activity within your home vicinity:

—Oh well I will directly go and ask... you know I am not afraid of people if someone is doing something shady, I will ask... —(A, 12)

Perceived active control (group level): the data revealed that the residents perceive management as positive entity through which they can exert control over their environment (gated community). Residents with this perception tend to believe that two parties, resident and management, should have the right to control over gated community. this perception inculcates the sense of mutual control and mutual responsibility.

Another male resident responded:

—This is a big community so we can't possibly know everyone. Besides that, there are domestic workers and construction workers that regularly comes to the community. So I usually go and ask if I find any one suspicious or stranger...and most of the time they are domestic workers so I politely ask them to leave the park as they are not allowed to sit in park...if needed to I can call to management but this never happened with me that I have to call management. (B, 03)

The analysis revealed that residents with perceived active control operate as an active agent in the environment (Gated community) and tend to intervene directly in case of any uncivil or suspicious activity within their community. The data also revealed another dimension of active personal control and that is the residents who tend to intervene indirectly by reporting any uncivil or suspicious activity to the management and follow up on it. As one female resident shared:

—Why should I put myself in danger, when I can easily call the management. This happened with me, there was a biker who was looking around like he was trying to locate something. I saw him from my window, and he came back and took another round of our street... I found it strange, so I called the management. Then in evening I called the management to ask who he was, and they told me that he was a delivery guy and was searching for address...”
(B, 01)

Table 14

Direct and indirect intervention behavior of gated communities' participants

Intervention	Behavior	Site A	Site B
Direct	Approaching the situation	07	04
	Directly		
Indirect	Approaching indirectly	09	06
	through management but		
	taking follow up		

Table 14 showing the direct and indirect intervention behavior across two gated research sites.

The data revealed that majority of participants from gated residential developments have active sense of perceived control and express it by verbalizing their sense of satisfaction and positive attitude towards residential space. As one male participant described it as:

—Well, it's quite comforting to have everyday amenities at one place...we don't need to go out for everyday grocery or in case of health emergency dispensary is available which can handle small health issues of residents. And you know it's quite child friendly and women friendly environment they can safely visit nearby parks or sports grounds.”(A, 24)

Furthermore, the data revealed that the residents with active territorial control (through management) believe that they are active participants of decision-making process, and through electing residents committee they directly take part in community's decision-making process. As one male resident said:

—I attend resident's committee regularly. I think it helps the management to make better and informed decisions...” (A, 21)

Perceived passive territorial control. On the contrary, perceived passive control reduce the sense of freedom and sense of privilege over spatial resources which in result appear in resident's withdrawal behavior from available spatial resources.

Perceived passive territorial control (Individual level). The data revealed that sense of control is manifested in resident's behavior of engaging and withdrawal from physical resources. Residents with perceived active control tend to use the available physical resources more frequently than the residents of perceived passive control. The data revealed that participants with perceived passive control over their residential space verbalize a general feeling of dissatisfaction over physical resources and eventually adopt withdrawal behavior (e.g., avoid visiting park or available market and unresponsiveness towards resident's committee meetings). As one of the male residents said:

—Well, this is a good community but over time it's getting overpopulated...now when I go to the park, I find may unfamiliar faces and it makes me uncomfortable...but you know I can't complain about it probably they also live here...residents of other blocks but I can't know for sure... and same is with our club... I suspect management gives membership to non-residents too to generate money... so I feel uncomfortable.”(A, 05)

Responding the question of reaction to uncivil or suspicious activity, another male resident said:

—It never happened but hypothetically if it ever does, I have management's number and I can give them a call..." (B, 09)

It is important to report here that even passive control does not mean no control. None of the participants from gated sites report indifferent attitude towards their residential community, which actually was the case for non-gated communities. Residents of non-gated communities reported passive control over their community with indifferent attitude. The data revealed that the residents with passive control tend to report any uncivil or suspicious activity to the management (without taking follow up).

Another dimension of withdrawal behavior that is withdrawal by choice was also showed up significantly in the data. Participants with hectic routines don't usually have time to use available spatial resources nor they have time to participate in resident's committee (no time to take on extra responsibility) so their withdraw is labeled as Circumstantial withdrawal.

Table 15

Passive actions and behaviors over uncivil activity

Action	Behavior	Site A	Site B
Taking	Reporting to management	08	06
Action	without asking for follow up		
No action	Ignoring the incident and taking no action	0	0

Table 15 showing the passive actions and behavior over uncivil or suspicious activity across two gated research sites.

Perceived passive territorial control (Collective). As I have already mentioned that gated residential communities offer an organized living to people and to make this possible the role of community management cannot be overlooked. The analysis revealed that participant's sense of control while living in gated communities comes from more indirect source like responsiveness or unresponsiveness of community management. As the direct control over physical resources is in management's hand and residents exert control by indirect means e.g., filing complaint, raising issue in resident's meeting or reporting any uncivil activity.

The residents who feel unheard by the management feel excluded and tend to develop withdrawal behavior by disengaging themselves from physical resources. The data revealed that residents with passive control tend to view their management in a more authority' based notion compared to the residents with active control who view it in a more cooperative' sense (See table 16).

Table 16

Perceived control, resident's role, perception of management and resulted control

Perceived control (collective)	Resident's role	Perception of management	Resulted Control
Perceived Active Control	Active agent in environment	Positive, cooperative entity	Mutual or shared sense of control
Perceived Passive control	Passive agent in environment	Authoritative entity	Compromised sense of control

Table 16 showing the president's role, perception of management and resulted sense of control across two gated research sites.

Perceived territorial spatial rights manifest in resident's perception of Accessibility (who should and should not be allowed in gated community) and distinct perception of insider/outsider. The analysis revealed that Individual resident with strong perception of territorial spatial rights view their residential space as mutually exclusive and reject accessibility of outsiders. They hold strong sense of territorial possessiveness and territorial ownership as compared to people with weak perception of territorial rights.

The data also showed that all the participants from two gated communities share the notion of exclusive space and believe that only residents of the community should be allowed to have access to the resources of gated residential community. A common reaction that I received over the question (should nonresidents be allowed to come and use available facilities?) was *→why? They don't live here* or *→that's our community why should they be allowed?* The data of perceived territorial spatial

rights revealed that almost all participants of gated residential community firmly reject the idea that any nonresident should be allowed inside.

It is important to note here that while probing the question of privatization of public space participants agreed on social segregation these gated developments are creating but still showed extreme discomfort to entertain the idea that nonresidents should roam freely in their residential space. The analysis surfaced that participant who showed acceptance for outsiders also did so by giving limited access and with legitimate reason. As one of the female participants described it as:

—Yes, nonresidents can come...our relatives come to visit us... they don't live here... domestic workers also come in but I believe any nonresident should come with legitimate reason and go through the security process...this is not Mohala system you need to understand that...that's why people come here to live in peace..." (A,12)

It is evident that participants of gated residential communities believe that only the residents of a particular community should have access and right over its resources and outsiders should have minimal or partial acceptance.

Sense of home. The sense of home is manifested in participant's account of home like feelings projected to their gated residential community. The analysis evidently showed that the home in its resident's experience and imagination may not perfectly match the physical structure of residential dwelling (Actual home space). Participants while sharing their different residential experiences described it as one of the reasons of residential mobility. People, when resources allow them; prefer to move to the place that they believe is closer to their perceived ideal home.

In this dissertation it is assumed that gated residential communities by providing all territorial elements (demarcation, defense etc.) will invoke the perception of ‘ideal home space’. The data revealed that all the participants moved to these gated residents came from open communities, in search of ideal home surrounding. One of the male participants shared:

—Yes, it is far from city, but you know I wanted to have a home in a neat and clean surrounding...and when this community was established, I bought a plot here and after few years when I had money, I built it...”(A, 10)

People usually express the need to feel the certain level of sense of homeness from the surroundings of their home unit. As Tayler & Brower (1985) said, ‘home does not end at the front door but rather extends beyond. The analysis revealed that residents express different level of homely feelings towards their gated residential communities. The data of homely feeling towards dwelling unit is categorized in six themes, ranged from ‘at home’ to ‘not at home’.

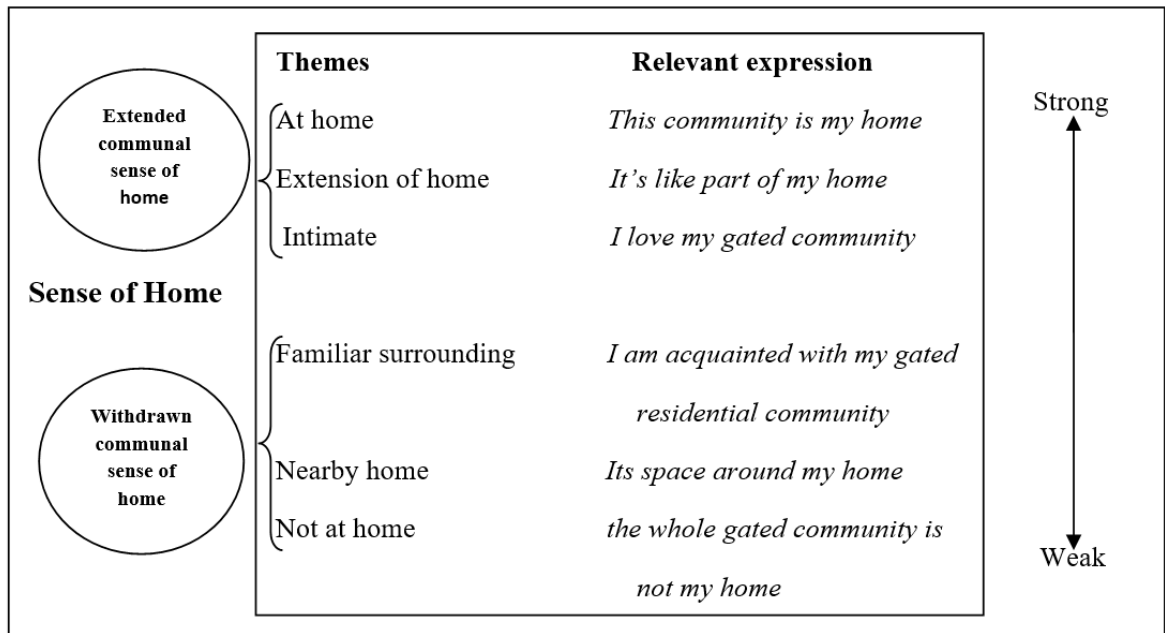


Figure 34. Showing the subcategory of sense of home along with emergent themes and relevant expressions.

Within the six steps of this continuum, an approximate division can be made to distinguish the environmental meanings that generally connote the qualities of “being-at-home” from those that do not. A closer look into this conceptual division illuminates how and why some residents tended to perceive their gated residential communities as home or homely while others did not perceive it in this way.

Strong end of sense of home (extended communal sense of home). At the strong end of sense of home are the positive expressions of participants towards their residential unit. Many interviewed participants reported that they perceive their gated residential community as home. The themes of strong end of sense of home are labeled as extended communal sense of home as participants view their residential unit as collective home territory. The expression of “being at home” is attributed to

resident's feeling of being at ease or freedom to enjoy without worrying much about their attire or persona. As one female resident explained:

—When I go to inside market, I don't bother changing my clothes... you know because its inside I am not going to cross the gate so why to change... but whenever I go to outside market, I specially change my clothes because I feel like I am going outside.” (B, 06)

On the other hand, interviewed participants of gated residential developments reported that they view their residential community as extended home territory and expressed this feeling by saying:

—When I see the monument of two horses outside the gate, I immediately feel like I have reached home' or —when I cross the barrier or security post, I feel like I am home'. (A, 14)

Participants from Site B which is geographically small community majority of interviewed participants reported strong homely feelings towards their residential community as compared to the participants from site A (geographically and densely large community) who expressed diverse homely feelings. The conceptual understanding of this dispersion is that the geographically and densely large communities make it humanely impossible for residents to get acquainted with all the co residents which could lead to weak perception of homely feelings. As one male resident from site B said:

—Our community as you know is a smaller one. Eden developers are known to establish small scale home units... and maybe that's why I almost know all the residents...I have relatives in EME too, but they are not as well acquainted as we are here...even guards know which child belongs to which home... you can

tell name to any of guard instead of address and they will guide you to that person's home..."(B, 04)

Another participant (female) from Site B described homely feeling as:

—This is the best home and neighborhood I ever had...our community is very well acquainted and whenever any new resident comes, we plan to go and greet them into community...it's like our family..." (B, 11)

It is conceptualized in this dissertation that small residential communities with less population makes it easier for residents to get acquainted with each other and develop more holistic and strong sense of homely feelings towards their residential unit.

Weak end of sense of home. Not all respondents expressed that they somehow view their residential unit as home or extension of home. The themes of weak end of sense of home are labeled as withdrawn communal sense of home because these themes express the resident's weak homely perception towards dwelling unit (residents' weak perception of gated community as collective home). They carefully distinguished their feelings of being at home as one male resident said:

—Well yes when I enter the society's gate, I feel relaxed, but you know I feel I am home when I actually reach home and not before that..." (A, 21)

Another resident shared the same feeling with less intensity:

—Well, when I cross the barrier, I feel like I am closer to home...but when I see the club house which is at the corner of my street, I feel like I am home." (A, 08)

The data revealed that even the residents with weak sense of home did not express the complete absence of homely feelings towards their residential surrounding.

The category of psychological ease is dependent on the two earlier categories of physical and functional ease. Since the participants of non-gated communities experiences physical and functional unease while living in a territorially disorganized home environment, none of the participant from non-gated communities projected ‘homdy’ feelings towards their residential unit.

Territorial fulfillment. The data revealed a conceptual category of territorial fulfillment which manifested in residents‘ sense of spatial empowerment. The category is developed by gaining analytic and critical understanding of above categories. This conceptual category reveals that people achieve spatial empowerment only when they feel the place, they are living in is offering them all the basic amenities (in case of home dwelling the availability of basic household facilities) and these facilities are functioning properly (facilitates occupant‘s living in that space) which in turn invoke in residents the psychological sense of ease.

Territorial fulfillment is manifested in two themes: firstly, resident‘s sense of satisfaction towards their living environment and secondly, resident‘s trust over their living environment. The category of territorial fulfillment and its relevant themes have emerged through rigorous comparison of all the above-mentioned categories and their relevant themes.

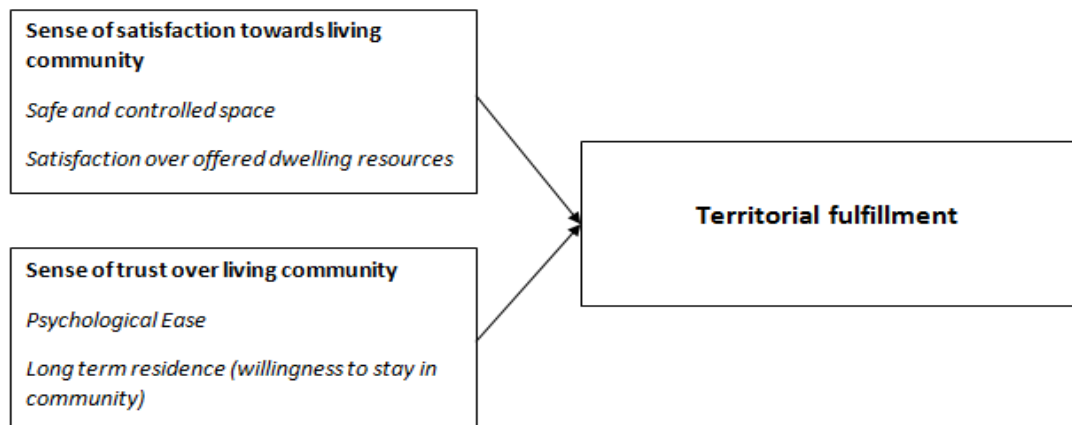


Figure 35. Showing the emerging themes of territorial fulfillment.

To achieve territorial fulfillment within the context of gated residential developments the proposed three components (situated person, situated environment and person-environment interaction) are necessary to exist in a coherent manner. Situated person (Individual resident of gated community) seeks to attain a home with territorial features (preference to live in gated community). This desire to attain home in territorially rich living spaces comes with certain hopes and demands from these places. People when move in gated residential developments come here with the hope that available territorial features (defense and demarcation) will allow them to have sense of control and organization in their living environment (situated environment; gated community). Individual resident as situated person while interacting with his/her situated environment (Gated community) experiences certain level of physical, psychological and social ease or comfort.

Overall sense of territorial satisfaction comes when residents believe that their living environment is providing them a safe and controlled space in which they can

perform their daily activities without any hassle or difficulty. Resident's territorial satisfaction is manifested in their sense of satisfaction over available spatial resources and spatial rights. The theme of territorial trust comes second, and it is achieved when residents experience psychological ease within their dwelling units. For this dissertation territorial fulfillment is achieved when people feel psychological ease and express trust towards their living environment and as a result view their gated community as long term or permanent home spaces (willing to stay in residing gated community).

One participant when responded the question of moving to a better gated community, he shared that:

—Oh no! never.... i don't want to go to any other community. I know a lot of options are available and they might be better than this one, but I feel very homely here...I know everyone, and we are a very well-acquainted small community...I made good friends and relations here.... let me say this that they are closer than my own family so why would I move..." (A, 25)

DISCUSSION

Discussion

Human Territoriality: Physical Dimension

The present study explored human territoriality within the context of gated and non-gated home environments. Identified research gap, which led to the present research work has already established the fact that within the field of environment-behavior studies, the phenomenon of physical environment is less explored. Although, the scholars had pointed out the importance of physical environment, especially the built environment (man-made) that is often created for a specific purpose (office for work, park for recreational activity etc.) (Withagen, de poel, Araujo, & Peeping, 2012). Territoriality is a spaced led phenomenon, which was natural to explore in today's urban home environments yet usually had been explored on micro scale territories (office space, home porches, marking seats in buses and beaches etc.) (Brown, 2009; Wells & Thelen, 2002; Gosling et al., 2002).

Additionally, the notion that near home territory or immediate home spaces also contain psychological significance was presented by Taylor & Brower (1985) but was rarely explored by researchers from psychological perspective (Graham, Gosling & Travis, 2015; Oya, 2019) or within meso scale territories. Therefore, the present study attempted to explore territoriality within gated and non-gated home spaces, expanding it on meso level while negating various notions introduced within Taylor's theory and hence producing innovative concepts and generating a theory, aligned with present cultural, social and environmental markers.

Within the context of residential environment, the gated and non-gated (open communities) are the two physical layouts that can be found in almost all major cities around the globe (Oya, 2019). Different physical layouts or physical designs of built environment can produce different social environments leading to multiple social behaviors in its occupants, for example, the research on nursing homes, college hostels, hospitals, and offices exhibited that different designs (open space vs. closed space offices or certain apartment layouts) have effects on the patterns of social interaction and sense of belongingness (Brown et al., 2005; Brown, 2009; Brown & Robinson, 2011; Ullan et al., 2012; Brown et al., 2014; Bronkema & Bowman, 2017; Monaghan & Ayoka, 2019).

Physical environments that are designed to facilitate social interaction appears to have direct impact on improved social lives of its occupants (Easterbrook & Vignoles, 2015). On the other hand, it has been identified that the certain characteristics of physical (built) environment can hinder social interaction or produce maladaptive social behaviors on both individual (e.g., roommates' conflicts over shared space) or group (e.g., street gangs fighting over territorial borders) level (Meagher, 2020). The purpose of the present dissertation was to explore the territoriality within two forms of physical (built) home environments (Gated and non-gated). The exploration of aforementioned two physical layouts of home environments has generated two selective codes which are "territorially organized home environment" and "territorially disorganized home environments".

Territorial organization of home environments. As discussed in previous chapters, the aim of the present dissertation was to explore the human territoriality within gated and non-gated home environments while further hypothesizing that

these two physical layouts of urban home environments would produce different territorial meanings among its occupants. In this present dissertation, the gated near home territory was conceptualized as ‘territorially rich environment’ (boundary wall and regulatory control of space) and non-gated territory as ‘territorially lacked environment’ (no boundary wall and no regulatory control of space). In the following section, the territorially organized and territorially disorganized home environments will be discussed.

Territorially organized home environment. The exploration of physical environment (gated research sites A & B) generated the category of “territorially organized home environments”. Spatial marking of gated communities, exclusive spatial resources within gated community and presence of local code of living showed significant contribution in making these gated spaces a territorially organized units that in turn offer organized living to its residents. The availability and effective functionality of above mentioned three components were translated into physical ease and functional ease. In other words, vivid spatial marking, availability, and functionality of spatial resources (parks, mosques, and market etc.) and effective and conflict free management of gated communities seems to have turned gated communities into territorially organized living units.

Spatial marking: Physical markers functionality. Although, marking behaviors (demarcation of space) is considered the hallmark of human territoriality and majority research on human territoriality primarily focused on these marking behaviors while least emphasizing over the psychological components of human territoriality (du p Bothma & Coertze, 2004; Marchinton & Kile, 1977). The researchers from psychology and environment- behavior studies primarily focused on

marking behaviors in micro scale territories (office space, home porches, marking seats in buses and beaches etc.) (Brown, 2009; Wells & Thelen, 2002; Gosling et al, 2002). The present study attempted to explore territoriality within meso scale territories (gated and non-gated home spaces), and it was assumed that vivid territorial markers present in gated home developments will not only help residents in attributing territorial meanings towards their gated home environment (physical built environment) but will also increase the psychological significance of near home territory (gated community). On the contrary, the absence of territorial markers in non-gated research sites would hinder residents in attributing territorial meanings towards their non-gated home environment and therefore, will decrease the psychological significance of near home territory (non-gated community).

Permeability of gated and non-gated research sites.

Physical permeability. Demarcation of space or physically marking a space by putting up walls, fences, trespass signs, or barriers are done to make space less permeable or accessible for others. In the present study the permeability analysis was done to understand not only the physical (actual) permeability of two gated research sites (spatial exploration of research sites) but also perceived permeability was identified by the resident's account. It is important to understand that the purpose of physical markers deployed in gated communities is to make the space less permeable especially for the outsiders or general public. Therefore, the resident's perception of permeability seems to have played an important role in perceiving their gated community as safe and exclusive space for living.

Physical permeability in EME (Site A). In case of EME housing society (Site A) the permeability analysis revealed that the housing society has seven gates or

access point which makes it physically more permeable but in fact only two gates are functional, and rest of the gates have become nonfunctional due to the peripheral developments over the years. In case of EME it is important to mention that it is one of the oldest modern gated establishments (Lahore's inner city is walled and oldest gated establishment in the city) in Lahore and over the years the society has become a role model housing community not only for citizens but also for property developers. Among the population of Lahore EME has earned the reputation of being the secured space to build a house in. As it has been discussed in the previous chapter that majority of participants from non-gated communities expressed their desire to move to EME or acknowledged EME as one of the best gated communities in Lahore.

The spatial exploration of site revealed that since its inception the community has not only maintained its status of being a 'safe private housing space' by putting up spatial markers (gates and human and technological surveillance system) but also effectively employing strategies to not give access to outsiders without going through the identification process. During researcher's field work in EME, permission of management had to be attained and the name was added in the list of allowed visitors. ID card was checked at main gate and check post every time during each visit. In EME this consistent tight scrutiny for non-residents probably have contributed for the society to achieve the status of 'safe private housing space'. Such strategies also contribute to make the space less permeable (physical permeability) and inculcate sense of safety to its residents (perceived permeability).

As mentioned earlier that EME has two functional gates: main gate and Gate no. 2. Unlike main gate, the back gate (gate no.2) only has a barrier and a guard who operates the barrier and restrict access is allowed from this gate for both residents and

non-residents. But the scrutiny on this gate is relatively lenient as one resident I interviewed lived near the gate 2 said:

“I think people living near main gate are more secure as you know I live near back gate (gate no.2), and I don't think guard allocated here are as efficient as the ones on main gate. But thankfully the gate closes at 8pm but still I believe this is a weak spot and someone can enter without going through the security process”

The above account not only reflects the vigilance of the residents of gated communities over the security measures but also indicates individual's desire to live in a less permeable environment.

Physical permeability in Eden Canal Villas (Site B). In case of Eden Canal Villas (Site B), the physical permeability is even minimal. The permeability analysis of physical layout of Eden Canal villas revealed that the community has only one gate and there is no other access point available to enter the community. It is important to mention that Eden canal villas (site B) was selected as ‘permeable site’ not because that it had multiple access points but because of the lenient scrutiny process at main gate. It was observed that EME (Site A) had more efficient and structuralized security protocols whereas, Eden being a geographically small size community had less structuralized security protocols. In Eden both guards and residents seem to rely on facial familiarity to identify outsiders. Eden canal villas is geographically small community (250 to 300 households) compared to EME that has almost three thousand households. Both being densely and geographically small sized community might have facilitated the phenomenon of ‘reliance on facial familiarity’. As one of the residents from Eden expressed:

–This is a small size community because you know it was motto of Eden Developers to provide compact housing unit to middle class population. Unlike EME and lake city (referring to geographically large communities in Lahore) Eden projects are quite small scale, those communities have had to hire an army of guards but here we have five or six guards who work in shifts and its easier for us (Residents) to recognize the guards and the guards are familiar with most of residents as well”

The geographical size of housing community seems to have an impact on the permeability of space. Although Eden canal villas (site B) does not have very structuralized security protocols but because of its small size and resident’s personal acquaintance with security staff seem to have inculcate the sense of safety to its residents. One resident said:

–Our guards know who is resident and who is outsider. One day I was driving my brother in laws car, he does not live here, and his car obviously did not have the resident’s sticker on it. But the guard let me through because he recognized my face and smiled at me while opening the barrier”.

Territorially disorganized home environment.

Physical permeability in non-gated research sites. To obtain a comparative picture, permeability analysis of one block from each non-gated research sites was conducted. Counter intuitively, non-gated home environments are highly permeable spaces and were not established with the intention of restricting public’s access to these communities. Not surprisingly, the physical permeability of non-gated research sites was much higher than gated research sites. One block of Allama Iqbal town (Site c) had eighteen permeability points and one block of DHA phase V had fifteen access

points whereas, in gated research sites EME had two access points and Eden had only one access point and on top of that the access to the gated communities is granted after some scrutiny process.

It is evident from the present research that citizens of Lahore prefer to build or buy a home in less permeable environment as majority of participants from non-gated communities expressed their desire to move to a more organized gated community. Gated communities offer a less permeable space to people to build a home in. People usually wants to exert control not only within their home spaces but also within the immediate spaces (near home territories) as well. Gated communities with less physical permeability or by minimizing access points offer a collective controlled space to its residents. It is safe to say that physical permeability of residential space is directly related to resident's sense of control or their desire to exert control in near home territories. The participants from non-gated research sites expressed their distrust or minimal control outside their home as one of the residents from Allama Iqbal town said:

—Off course this is not a gated community so any one can come to our street at any hour of day and night. I cannot safely park my car Infront of my home even without properly locking it”

Similar issue was expressed by a resident of DHA:

—You know people think that rich people live in DHA [perception of DHA being elite residential area] so obviously street crimes and bulgery are common here. Every other day we here that someone's car had been stolen from Infront of the house or mobiles being snatched while walking on the

sidewalk so yes I don't think we have any control outside the boundary of home”.

Contrary to this, in gated research sites, residents have parked their cars in streets without any major concern. One resident of EME shared during interview that their garage did not have enough space, so they usually park one vehicle outside even during night. Similar patterns were observed in Eden canal villas where participants verbalized that they do not even feel the need to lock their main gates in daytime. From the data, it is safe to conclude that people's desire to exert control in immediate home spaces is being facilitated by the less physically permeable environment provided by gated communities.

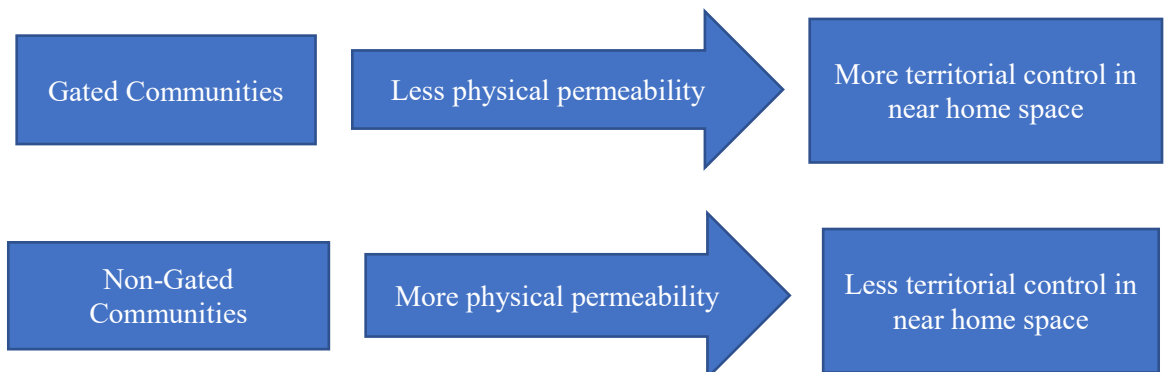


Figure 36. Showing the pattern of physical permeability and territorial control in near home space within gated and non-gated research sites.

Perceived permeability in gated research sites. Perceived permeability of gated research sites was identified through the accounts of participants. It had been established that gated communities offer less permeable environment to its residents but residents' perception of permeability of their respective gated community varies. Majority of participants from gated research sites tend to believe that their community

is less permeable in other words they believe that outsiders cannot get easy access to their gated community hence they perceive their gated community as safe space. Few participants who perceive their gated community as permeable (outsiders can get easy access) are those who perceive domestic workers and construction workers as outsider and believe that these individuals can get easy access to the community and expressed their suspicion that few theft incidences that happen in community are because of these people. One resident from EME said:

—Off course theft incidents happen here too. Only Allah can provide the safety, but I have heard that in most cases it is found that domestic workers are involved. You know they get to know your home your routine and it provides aid to their ill intentions. My in laws live in EME too and when they went on vacation, someone entered from the back gate and stole kitchen appliances and some other stuff. So, it can happen to anyone”.

Another resident from EME said:

—This is a big society and construction, and renovation happens every day. And the construction workers must come to the society so yes, I have reservations. Society cannot keep always check on them. I know when my next-door home was under construction, I used to double check my locks before leaving home”.

This pattern of blaming domestic workers for theft incidences and perceiving them as outsider was similar in both gated research sites. In case of Eden canal villas only one participant expressed the similar concerns as she said:

—Thank God unlike EME or other societies we don't have large number of robbery cases here. But you know few cases that happen here I believe these

are because of the domestic labor they get acquainted with your home and then they bring their husbands or other male accomplice to rob a home. And this usually happens when no one is home or residents are on vacation or at job”.

Perceived permeability in non-gated research sites. In case of non-gated research sites, it is evident that perceived permeability is very high. Participants from non-gated research sites understood anyone can access their residential area. The results revealed that participants from non-gated research sites showed their dissatisfaction over high permeability of their community. In case of Allama Iqbal town (Site C), residents attempt to make their streets less permeable by putting up gates on both ends of street not only show their dislike of high permeable environment but also indicate the lack of the sense of safety among residents (Detail in Result chapter).

Although, in case of DHA the phenomenon of installing gates was not present because DHA authority has strict architectural rules and residents are not allowed to make any alterations to their adjacent home spaces without first getting permission from DHA authority. Despite this difference of making immediate home space less permeable on self-help basis, the participants from both non-gated research sites indicated their discomfort over the high permeability of their respective non-gated communities. In both sites’ participants expressed their desire to either move to a more well-organized gated community (all participants of Allama Iqbal town and majority from DHA as well) or hope that existing management should alter the space to make it less permeable and more secure for its residents (two cases from DHA).

Significantly, almost all participants interviewed from Allama Iqbal Town expressed their desire to move to some gated community in future (few participants were in process of constructing home in gated community) but in DHA although all participants expressed that the street crimes are very high in DHA due to the easy access to public (high permeability) but the desire to move to another community was relatively less than the participants from Allama Iqbal town. This could be because DHA is considered an elite area in Lahore and advantages people get by being associated with this area (being perceived as member of elite class) might have an impact on their decision of mobility. Another factor that could impact their decision of mobility is high property value in DHA as one of the participants from DHA said:

—Off course I know that this area cannot be as safe as a good, gated community like EME but the property value here is not only stable, but it also increases with every passing day. So, you know I think it's good investment”.

The data revealed that perceived permeability is directly related to residents' sense of safety. In other words, residents who perceive their home environment as permeable (outsiders can get access without scrutiny) do not feel safe in immediate home spaces of their respective gated and non-gated communities (street or block). Only few participants from gated communities (one from site A and three from site B) perceived that the access points to their gated community can be breached. As mentioned above they tend to believe that domestic workers or construction workers are responsible for such breach and not complete outsiders. On the other hand, all the participants from non-gated sites expressed their concern over safety due to open

public access to their communities and did not feel safe in their immediate home spaces (adjacent street or block).

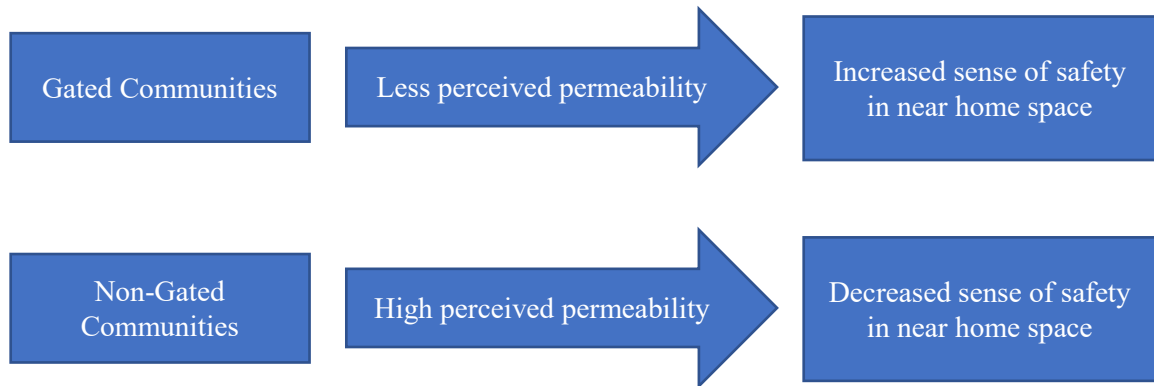


Figure 37. Showing the pattern of perceived permeability and sense of safety in near home space within gated and non-gated research sites.

It is quite evident from the present research that in context of Lahore, citizens prefer to own or live-in a less permeable space, because gated communities offer a more territorially controlled (less permeable space, restricted access to outsiders) environment the participants from both data sets (gated and non-gated) expressed their liking towards such territorially secure residential communities. Furthermore, it is apparent from the present study that physical layout (gated and non-gated) of residential unit impacts the resident's relationship within immediate home spaces. In other words, participants from gated communities while living in a less permeable environment experience more control in their immediate home space and felt more secure than the residents of non-gated communities.





Figure 38. Showing the physical layout and its impact on residents' sense of control and safety in near home space within gated and non-gated research sites.

Territorial organization: Physical markers as symbolic communicators.

It has been conceptualized for the present research that within gated home developments territorial physical markers (boundary walls, gates, and barriers) turn the gated development into a 'territorially rich environment'. The exploration of these physical markers revealed the category of 'territorial markers as symbolic communicators', and it revealed the significance of these physical markers for residents and for outsiders. As 'inward communicators' these physical markers represent what they mean for the residents of a particular gated community and, as 'outward communicators' what messages they send to the outsider (public) about that gated home development. The exploration of physical markers on meso level is a contribution of the present research. It is important to mention here that territoriality is considered a behavior of individual and small groups (Taylor, 1988; Gifford, 2017) and in the present research the exploration of territoriality within the context of gated home developments yielded collective territorial patterns in small groups (meso level).

Physical marking (demarcation of space) is one tangible and physical aspect of human territoriality, and it has been explored by scholars of environment-behavior studies extensively on micro level (Brown, 2009; Wells & Thelen, 2002; Gosling et

al., 2002). The present research attempted to explore physical markers within gated home developments where they are used to mark a collective territory (gated community) to serve the need of small group (residents of gated community).

The exploration of physical markers in gated communities identified these markers as *symbolic communicators*. As *inward symbolic communicators* these markers inculcate the sense of collective ownership, collective spatial identity, and collective spatial control to the residents of gated community. on the other hand, as *outward symbolic communicators* these markers announce gated home space as collective private property and defended space to the nonresidents. Gosling and his colleagues while working on micro scale territories identified two dimension of physical marking *self-directed marking* and *others directed marking* (Gosling et al., 2008; Gosling et al., 2002).

While working on micro scale territories they identified that individuals make environmental alterations such as displaying family photos or academic certificates in offices, these type of marking not only represent their personal narrative but also display occupants *self-information* to others. In the present study the physical markers as *inward symbolic communicators* seem to help residents in achieving a shared personal narrative of collective ownership, collective control and collective identity. Participants of gated communities seem to view the physical markers (walls, gates, barriers etc.) as symbol of collective control, ownership, and collective identity (discussed in previous chapter).

The second dimension of physical marking identified by Gosling and colleague (Gosling et al., 2008; Gosling et al., 2002) was *other directed marking*. This type of marking is used to communicate messages to the outsiders for example

displaying bumper stickers on cars or office or home door decorations are used to make statement to others about one's behavioral tendencies and personalities. Ample evidence now exist that home and office environments reflect surprisingly accurate information about the personalities and behavioral tendencies of its occupants (Szlemko, Benfield, Bell, Deffenbache, & Troup, 2008; Gosling et al., 2002; Wells & Thelen 2002; McElory, Morrow, & Ackerman, 1983; Sandilands & McMallin, 1980).

The identification of 'outward symbolic communicators' in this study represent the similar notion, as they send territorial messages to outsiders about gated community being a collective private and defended spaced. The deployment of physical markers in gated communities appears to communicate to the outsiders that this space is a collective private property which is defended by its occupants and cannot be accessed without permission. Significantly, efficiency of these physical markers can impact the perception of a particular gated community among public. As it is revealed from the present study that participants of non-gated communities expressed EME (site A) as being most secure or defended community.

It appears that this perception of EME is due to the effectiveness of physical markers leading to perception among non-residents (participants of non-gated communities) as model community. During researcher's visits to EME, it was noticed that more vigilance is required for documents (permission letter of entry and ID card) compared to Eden canal villas (site B) where access was granted without the inquiry of documents after few visits. Apparently, EME got reputation of a model gated community because of its strict entrance policies and efficiency of physical markers (huge gate, visible check post, and electronic barrier system). Due to these effective territorial markers, it is perceived that EME can offer more organized and less

permeable home space. Almost all participants interviewed from Allama Iqbal town (site C) rated EME as the model community and expressed their wish to have a house there.

In case of Eden canal villas, the observation revealed that although, the same physical markers are deployed, but on much smaller level. Although Eden is a geographically small community, and the efficiency of physical markers seem to have fulfill the need of its residents in order to make them feel secure and defended.

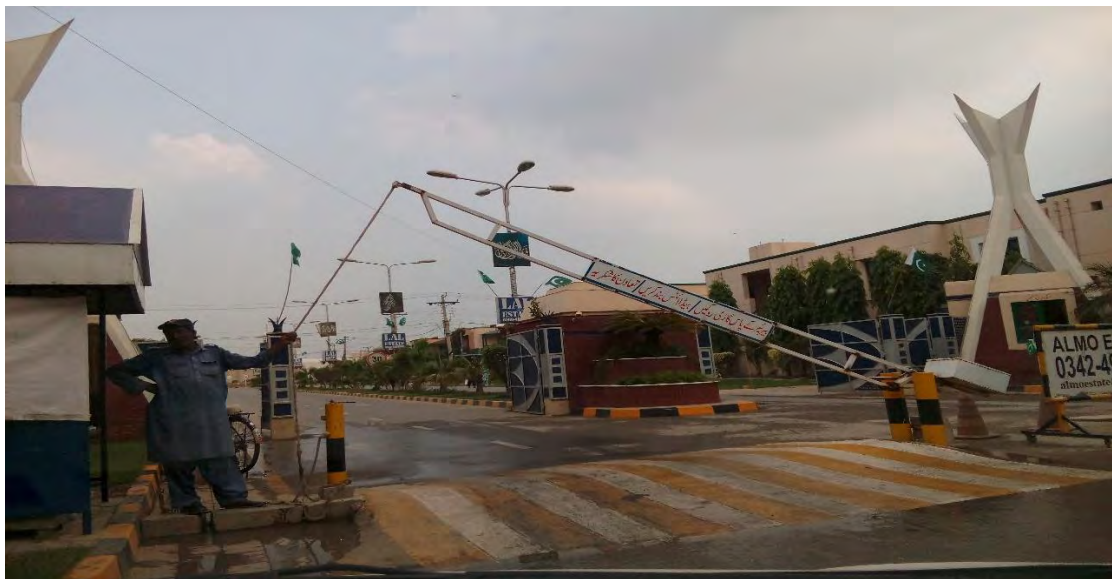


Figure 39. Site B. Picture showing the entrance of Eden canal Villas (entrance/ Approachability)

The picture shows the entrance of Eden Housing society. It is visible in the picture that the physical markers (boundary wall, gate, barriers, and guards) are present but compared to EME, the approachability of Eden housing society was easy. During visits, it was noticed that the entry was solely based on the discretion of the guard operating barrier manually. Similarly, during multiple visits to the society, it

was noticeable that few times appointed guard did not even bother asking me about ID or purpose of the visit. There could be two reasons of this first, being a woman researcher, gender advantage was granted as women are not perceived as threatening or suspicious. Secondly, Eden is a small housing society with 2500 to 3000 homes which required fewer manpower to manage. So, it is quite possible that guard might have developed sense of familiarity (familiar face). On the other hand, to enter EME society, identification and administrative permission to enter was needed.



Figure 40. Picture showing the entrance of EME housing society (site A) (Picture taken by author)



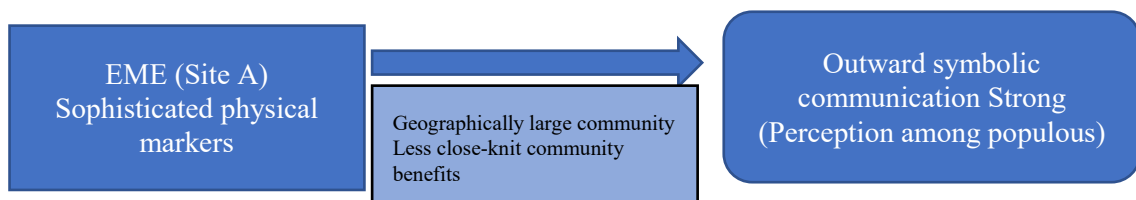
Figure 41. Compilation of pictures of the entrance of EME housing society (Picture taken by author)

The above pictures are presenting the entrance of EME housing society. The below left corner picture clearly depicts the partially open entrance with the presence of barrier which does not allow easy approach to the society's main entrance gate. The road leading up to the main gate is wide enough for double line vehicle entry, but single line vehicle entry was allowed. This spatial tactic made approachability somewhere difficult for people. To check every vehicle that enters in society the single line entry was open. Top left corner shows the entry gate of EME. The 'Stop sign' on the main gate is clearly visible and the gate was partially open. The picture also shows a sign board clearly indicating to where should vehicles with stickers (Resident's vehicles) and without stickers (visitor's vehicles) should go. The third picture on top right corner shows the security camera along with the stop sign and electronic stop barrier. This is a stop sign on check post where visitors must identify themselves with ID card and are also asked the purpose of their visit. The fourth

picture on down right corner shows a sign board which instructs the visitors about speed limit allowed within society.

The deployment of physical markers in gated communities impacts the perception of a particular gated territory among populous. The exploration of physical markers within two gated research sites revealed that by displaying these markers vividly and using systematic territorial tactics efficiently the perception of gated community as secure and defended home space can effectively increase among public (outward symbolic communicators). Moreover, the perception of gated community as secure and defended home space can turn it into a desirable home environment among citizens. In case of EME, due to its vivid territorial markers and strict policy of scrutiny, it has not only increased its popularity among citizens of Lahore but also gave it a reputation of ‘model gated community’ in Lahore.

Compared to EME, Eden canal villas is a geographically small community and the community had deployed small scale physical markers and entry can sometimes be granted without proper scrutiny, but the residents of Eden canal villas were observed to have enjoyed small kit community benefits. It was observed in case of Eden canal villas that residents don’t bother to close their home gates in daytime, and they let their children go to parks unsupervised. Although, EME’s perception among populous as being a secure defended space is stronger than Eden but the residents of Eden seem to enjoy more micro level (parking cars outside of home, letting children go to park without adult supervision, and keeping home gates open in daytime) freedom in their near home territory compared to the residents of EME.



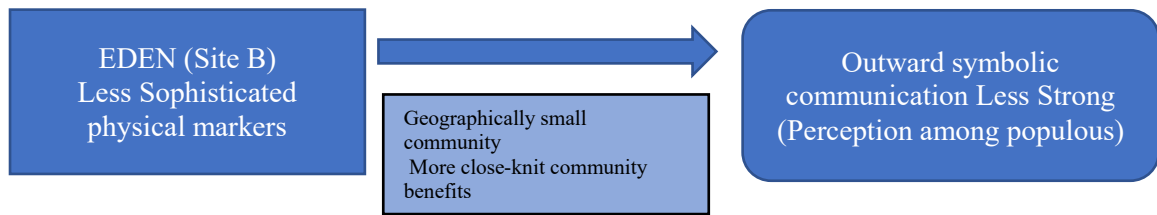


Figure 42. Showing the sophistication of physical markers and its impact on outward symbolic communication along with factors of community size and community benefits among gated research sites.

The comparison of physical markers within two gated research sites revealed that sophistication of physical markers in case of EME (large scale physical markers and manual and electronic security system) facilitates in establishing the status of community as being a secured and defended home space. Deployment of large scale sophisticated physical markers increases outward symbolic communication (outsiders perceive community as secure organized home space). On the other hand, the less sophisticated physical markers were observed in Eden canal villas and outwards symbolic communication was less strong compared to EME.

The exploration of two gated research sites revealed that the size of gated community is a significant indicator of community life. Although, in EME physical markers are more sophisticated and it has ‘Model gated community’ status among populous but the community life was not as close knit as was observed in case of Eden canal villas. The reason could be the small size and less population in Eden which could have facilitated in establishing close-knit community in Eden.

The present dissertation followed the Taylor and Brower (1988) near home territory model and unlike Taylor and Brower who proposed that territorial functioning occurs only in micro level, the present study indicates the possibility of

territorial function on meso level. The present analysis revealed that within home environments the demarcation of space and deployment of physical markers can enhance territorial functioning from micro to meso level. In both gated research sites, most of participant viewed their gated community as the extension of their homes.

Territorially organized/disorganized living: Spatial resources. The present study investigated the two physical layouts (gated and non-gated), and it was conceptualized that gated communities by using territorial tactics are the spaces that can be classified as “territorially rich home environments”. Three types of spatial resources were identified in both gated and non-gated communities: Recreational spatial resources, religious spatial resources, and spatial resources for everyday amenities. These spatial resources are available in both gated and non-gated research sites. The present study explored the physical environment (gated and non-gated) within the context of situativity theory (the contextual approach to study physical environment).

Very few publications acknowledge the importance of physical environment and how different physical layout can produce different psychological and social behaviors (Cesario, Plaks, Hagiwara, Navarrete, & Higgins, 2010; Gosling, Gaddis, & Vazire, 2008; Graham et al., 2015; Ishii, Miyamoto, Rule, & Toriyama, 2014; Saxbe & Repetti, 2010; Meagher, 2020). The opportunities a physical environment provides to its occupants is called affordance by Gibson (1979) in ecological psychology. Heft (2007) called these affordances *behavioral opportunities* that are available in an environment.

The opportunities available in two settings (gated and non-gated) were explored and it was identified that resources available in gated and non-gated home

environments are same. Above mentioned three spatial resources are available in both gated and non-gated research sites.

Being served vs. being given, Attitude towards spatial resources. Both gated and non-gated home environments have same spatial resources but residents' attitude towards these resources was completely different. It was interesting to observe that how the different physical layouts (gated and non-gated) could produce different attitudes. Residents of gated communities had an attitude of 'being served' as they view available spatial resources as exclusive collective property and felt privileged over the exclusive use of these resources. Resident's acceptance of outsiders in both gated communities were minimal. Over the exclusive use of spatial resources one participant of EME said:

—Our management has started giving membership of sports complex to the outsiders and I don't think that is good. We will raise this issue in next resident's committee meeting. What is the point of living in gated community if management is going to make it a Mohala system where anyone can enter'?

Another participant said:

—People have bought houses here to relieve themselves from stress. Stress of minting house and having necessary facilities within the vicinity of home while feeling safe. We feel safe here because we know management will not let any non-resident enter unnecessarily. But if the management is going to give membership to outsiders to generate money, then next, they will allow the outsiders to use other facilities as well. They have given plenty memberships to the outsiders already and now they are saying that they can't revert the decision because they have taken the payment. I now avoid going to the

support complex and we are asking other residents to boycott the support's complex".

During my data collection this issue arose between management and residents of EME housing society. The management has started giving membership to the outsiders in order to generate money and residents of EME were resisting this decision and forcing EME management to revert it. It was very evident from the participant's accounts that their privileged attitude towards spatial resources is due to the exclusive use. Whenever they feel that any spatial resource is not exclusive, they started showing their discomfort.

The similar phenomenon was observed in Eden canal villas. Eden's management has allowed outsiders to use the water filtration plant. One participant from Eden said:

—I have reservations you know that why they have allowed outsiders to use water plant, but I know I can't do anything about it. They will see me as bad Muslim you know".

Sharing water is considered sacred in Muslim societies and restricting water supply is considered rude and unethical. Even with the sacred notion attached to the phenomenon, residents felt uncomfortable over the permission of outsiders to use spatial resource. Both gated research sites had above mentioned three spatial resources, Eden had small scale resources and EME had more diverse and large-scale spatial resources and participants expressed their privileged laden attitudes towards these spatial resources.

Within the case of non-gated research sites, it was very evident that residents had quite non-privileged attitude towards the available spatial resources.

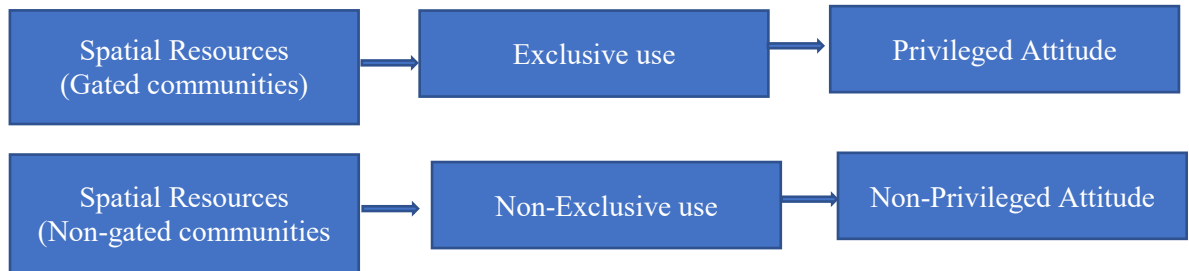


Figure 43. Showing the exclusive and non-exclusive use of spatial resources within Gated and Non-gated research sites.

Although, DHA has big malls, commercial markets, and other spatial resources but residents understood these resources are there for their use, but they did not show privileged attitude towards these resources. It was interesting to note that how territorially rich environment (gated communities) can inculcate the collective sense of ownership over available spatial resources. Significantly showing that physical layout (gated and non-gated) impacts the resident's attitude towards their near home space. In other words, gated home environments provide more opportunities to the occupants to engage in territorial behaviors or to draw territorial meanings from their environment.

Territorially organized living: Resource convenience and Spatial aesthetics. Other than spatial resources gated communities offer a more pleasing and aesthetically good home environment. While identifying the types of gated communities Blakely and Snyder (1999) called such communities ‘lifestyle’ communities. Unlike Suburb communities that offer residence to retired people Blakely and Snyder identified that people started moving to other gated communities

to apparently improve their lifestyle. Within the context of Lahore, the results of present study indicate that upgradation of lifestyle is one of the reasons that people move to these communities. It is important to mention here that it seems that citizens mobility to these gated communities is not just to upgrade lifestyle but also the desire to have a home in exclusively secure environment and resource convenience and aesthetically pleasing environment seems to have attract citizens of Lahore to these communities.

The present study identified that resource convenience was the most important factor expressed by participants of gated communities and second important factor verbalized by participant was the having home in aesthetically pleasing environment. It is important to mention here that considering the security situation in Pakistan, it was assumed initially that people would prioritize safety than any other factor as being the reason to move to gated communities but surprisingly that was not the case. As one participant responded to the question of why they have moved to gated community, answer was:

—Well, I had small children and I have to go to tours for my work and I wanted to move my family where my wife and children could have facilities and they can call someone in case of any emergency. Here in EME school is available, hospital is here, park is here and even if something breaks down my wife can call management...you know it's easier to sustain house here compared to Johar town (open community in Lahore) where I was living before". (Resource convenience)

The opposite discourse was found from the data set of non-gated communities. Especially, in case on Allama Iqbal town, all the participants expressed their desire to

move to a gated community because of resource convenience in their area. As one participant responded:

–Everything is available there you know. Here you must be responsible of everything, and management is non-existent, there is no discipline here people throw garbage in the street and if garbage man does not come it stays there and you can't do anything about it. In winters gas supply cut off without any warning and in summer electricity cuts off without any warning. So, you know in a good, gated community like EME and others they have their own power systems or alliance with wapda". (Resource inconvenience)

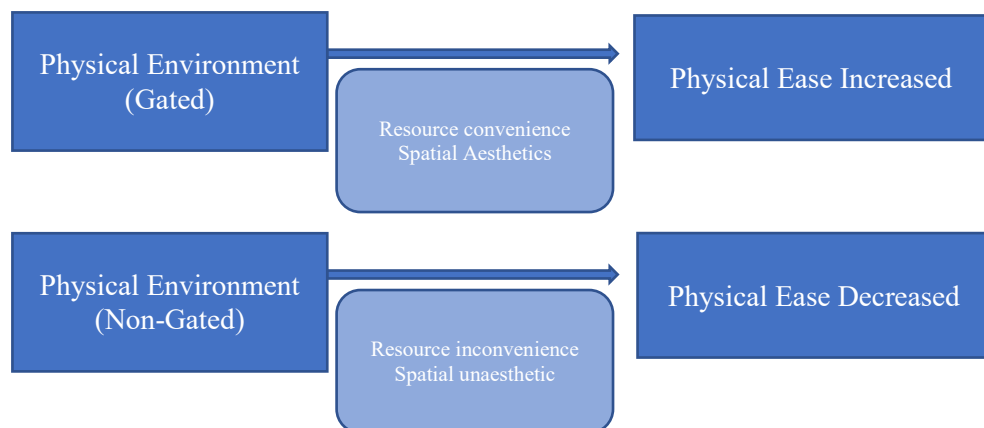


Figure 44. Showing the exclusive and non-exclusive use of spatial resources within Gated and Non-gated research sites.

Other than resource convenience the spatial aesthetics was identified as being the second most important quality of gated physical layout that attracts people to these

communities. The exploration of Spatial organization of gated communities revealed that within both gated research sites management try to create esthetically pleasing environment by maintaining the upkeep of sidewalks and other spatial resources (see Figure 43 and 44).

Gated home communities by providing the aesthetically pleasing and organized living seems to have turn the space into a desirable home environment for the citizens of Lahore. It is important to mention here that not all gated communities in Lahore have similar physical attributes and the change in the physical attributes in other communities might lead to different



Figure 45. Showing the spatial aesthetics of EME (site A). Pictures taken by author.

Both gated research sites for the present thesis were selected to explore the home environment that was ‘territorially rich’ and the gated communities with inactive physical markers (no restriction on entry) were excluded as they were not territorially rich home.



Figure 46. Showing the spatial aesthetics of Eden Housing society (site B). Pictures taken by author.

The exploration of two physical layouts (gated and non-gated) revealed that by altering the physical environment (deployment of spatial marking and spatial resources in gated communities) can alter the occupant's behavior within that environment. In this section, the exploration of physical environment within gated and non-gated environments revealed the significance of physical environment on human behavior. Through extensive literature review, it was conceptualized that gated communities are in general 'territorially rich' container of space and would have the potential to invoke territoriality charged understanding of space.

The present study confirms this notion regarding physical environment and following four aspects of physical environment are important to mention here. Firstly, the results from both gated research sites suggest that territorially rich environment on meso level (gated community) significantly impacts the behavior of residents and attitude towards their immediate physical environment (near home territory).

Secondly, different physical layout (gated vs. non-gated) can produce different territorial functioning, in other words, the change in physical layout (design of space) have significant potential to invoke different type of territoriality in different territories. Thirdly, the alteration in physical attributes of territory (deploying physical markers for demarcation of space in case of gated communities) can enhance the psychological significance of near home territory (gated community). Similarly, physical attributes that don't serve the occupant's territorial need (absence of demarcation of space in case of non-gated communities) can decrease the psychological significance of near home territory (non-gated community). Fourthly, consistent with Taylor & Brower's (1985) conceptualization that near home territories also contain psychological significance, the present research confirms this.

The psychological significance of near home territory in case of gated communities is naturally apparent but even in case of non-gated research sites participant's concern over their highly permeable home territory and desire to move to a gated living also proves that people pay attention to the spaces adjacent to their home, hence, near home territory contains psychological significance. Fifth, within the context of Lahore, Pakistan, the present study concludes that physical layout of gated organized living is preferred by the citizen over non-gated disorganized physical layout.

Human territoriality: Socio-cultural dimension. Physical built environment is generally designed for very specific functions to facilitate or invite specific type of behaviors (Mehger, 2020; Withagen, de Poel, Araújo, & Pepping, 2012). Different physical spaces may aid in fulfilling the different psychological needs, such as autonomy, affiliation, and competence (Deci & Ryan, 2000). Recent researchers have

found that social rejection or discomfort drive people to move to different social environments. People tend to take refuge in nonsocial physical settings following social rejection. If opportunities are available people seek places that can provide them solitude and protect them from further social pain (Maner, DeWall, Baumeister, & Schaller, 2007; Williams, 2007; Meagher & Marsh, 2017; Nguyen, Ryan, & Deci, 2017; Ren, Wesselmann, & Williams, 2016). Moreover, to satisfy social needs people not only seek new social settings but humans also design their own environments that reflect their motives (Gosling, Ko, Mannarelli, & Morris, 2002; Heft, 2007; Withagen & van Wermeskerken, 2010).

Within the context of urban environment of Lahore, Pakistan it appears that the gated communities are the social settings that provide the opportunity to people to escape the social discomfort of ‘disorganized living’ of non-gated environment. Participants from both gated and non-gated sites verbalized the decline of social ties within community. as one participant from Eden canal villas while recalling her previous residences in Lahore said:

—We lived in Shahdra [Open community in Lahore] for more than 30 years. I spent my half-life there and I can remember that there was no fear. The main gate of our home remained open all day and we used to go to play to our neigh ours homes. Our neighbors were closer to us than our relatives. Everyone knew everyone we had each other’s back. Elder people used to sit in the street, teenagers used to play cricket in street our street was like part of the house. Then situation started changing. Over the years people became more and more privacy lovers may be because of this technology. This reliance on technology has impacted our relationship patterns both inside and

outside of home. Then time came when people started moving to new areas and we moved very late. All our old neighbors had left the area before us and I had seen years when we kept our door locked because we had no clue who was living next door. For some reason people started disliking the neighborly interaction so we moved to Eden". (Declining social ties)

The similar concern over the decline of social ties was verbalized by many participants in the present research. This seems that old social setting (Mohalla system in non-gated communities) provided opportunity to the residents to established closer ties and these social ties seem to have impact on their territorial behaviors and attitudes within their community. close social ties in non-gated home spaces could be the source of safety within those communities as it would have minimized the possibility of unwanted social interaction (strangers would have been identified in close knit communities). With the decline in social ties over the years it seems that non-gated home spaces became less desirable for the citizens as they became vulnerable spaces and invited unwanted social interaction.

This could be interpreted as the decline in social ties in non-gated home spaces created social pain or discomfort for the residents, therefore, people started moving to territorially organized gated communities. The data from non-gated communities' shed light on this phenomenon in present day as well. One participant from DHA said:

–No. we don't socialized with our neighbors. People don't like it anymore, I guess. Going to neighbor's house was a normal thing in past but now people don't like meeting with neighbors at least not in DHA. Here people like to keep to themselves".

Predictable social interaction in Gated home spaces. The data revealed that ‘predictable social interaction’ within the homogeneous social setting of gated home environment is something that not only attracts people towards these communities but also could be the factor of sprawl of these communities on our urban landscape. The data revealed that the social discomfort of unwanted social interaction that residents experience in non-gated communities is one of the reasons of mobility to gated communities. The present study revealed that gated home spaces provide the social setting that facilitates social interaction among its residents. The homogeneous social environment of gated communities makes it easier for the residents to interact with one another.

It appears that by territorially organizing home space, gated communities provide the social conditions that facilitate and encourage social interaction among residents. The comparative analysis of two social settings (gated and non-gated) revealed that within the context of non-gated sites, social interaction was closer to non-existent. Participants from both non-gated sites verbalized the lack of social interaction in their respective communities and gave reasons like ‘decline of social ties’, ‘technology replaced human interaction’, ‘change in value system’, ‘preference to nuclear family system’ and ‘increased need for privacy’.

On the other hand, the data from gated research sites revealed that the social interaction among residents of gated communities was much better than the non-gated communities. Within the context of gated sites, it was evident that residents were not concerned about any kind of unwanted social interaction (as was the case in non-gated communities) but rather social interaction in gated communities was an available choice. In both gated research sites, social interaction among residents was observed.

The neighborly ties if not ideal but were present in both gated environments. Social gatherings (women committees, kitty parties, club meetings, resident's committee etc.) of residents were observed in both gated sites as well. It appears that by making space territorially organized, the conducive social conditions can be created, which in turn can facilitate or invite social interaction.

As it has been discussed in previous chapter that the findings indicate that gated home environments provide a homogeneous social setting by placing similar kind of people in one place. The present study indicates that within the context of Lahore, gated communities are homogeneous social settings that contain social conditions (likeminded people, local management, sense of community) which in turn facilitates social interaction among residents and among residents and local management authority. Contrary to this, the situation in non-gated sites was completely opposite and both non-gated sites were heterogeneous in nature and social interaction among residents was reported as closer to non-existent.

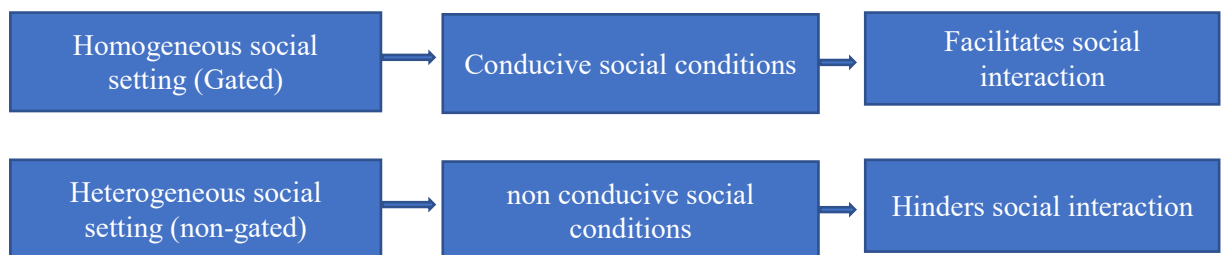


Figure 47. Showing the patterns of social settings and social interaction within gated and non-gated research sites.

The present study confirms Tayler's notion (1988) that territoriality in different territories may vary according to the social and cultural conditions present in

that territory. Two physical layouts of home environment (gated and non-gated) were studied, and it is found that social settings in gated and non-gated sites were completely different and in turn produces different territorial senses among residents.

Human territoriality: Psycho-cognitive dimension. The psychological and cognitive dimension of human territoriality within gated and non-gated research sites revealed four major aspects which are ownership, belongingness, control, and sense of home. The present study used the ecological lens (situativity approach) to understand psychological dimensions of territoriality situated in two urban physical environments (gated and non-gated). Barker (1968) found that behavior is best explained by place, a physical setting that contains both collective social activity and physical attributes of place help in understating human behavior. It is found that humans design their physical environment in a way that facilitates social activity situated there and in turn develop psychological processes (Marsh et al, 2009; Meagher, 2020).

The present study found that two physical layouts (gated and non-gated) provide opportunity for different situated social and psychological processes. The present study found that the territoriality situated in gated home environments facilitates psychological process of ownership, control, belongingness, and sense of home. On the other hand, the territoriality situated in non-gated home environments have failed to invoke these psychological aspects in its residents.

Psychological dimension: Sense of ownership. Within the context of gated home spaces, the data revealed that residents develop sense of ownership by establishing territorial identity and responding to personalization of space. The homogeneous social and physical environment of gated communities seems to help residents to develop territorial identity. In other words, sharing the similar physical

and social setting facilitates in identifying with the place they reside in. Other than similarity the other component is association which residents develop towards their gated home space. The participants expression of affection and trust over the home space depicts their strong or weak association with their community.



Figure 48. Showing the process of territorial identity for gated research sites.

The incorporation of place into one's larger concept of self is called place identity (Gifford, 2017). *"Who we are"* also includes *"where we are"* within the context of home environments, it appears that individuals pay attention to the spaces adjacent to their homes. The significance of near home territory is important in forming territorial identity. The present study revealed that if a residential area does not offer efficacy (being able to get things done or resource convenience), which was the case in non-gated sites, residents territorial identity weakens.

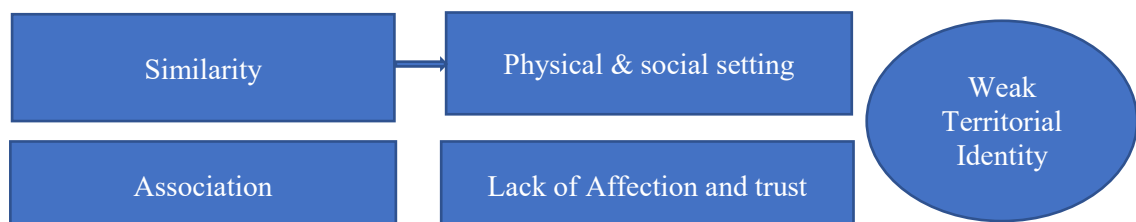


Figure 49. Showing the process of territorial identity for non-gated research sites.

Unlike gated research sites the data from non-gated research sites revealed that the process of identity formation was same but in the participants of non-gated communities the sense of association (expression of affection and trust over spatial

resources) towards their residential area was significantly weak. In both non-gated research sites Allama Iqbal town and DHA, participants expressed detached feelings for their residential area. Although, DHA in Lahore is considered an esteemed elite area, but being a non-gated area, it appears that residents were unable to develop association with their near home territory.

Other than territorial identity, it is found that personalization efforts in gated sites inculcate the sense of ownership in its residents. The personalization in gated communities is a group's effort of ownership and the exploration of gated communities in present study revealed that the spatial distinctiveness (from other gated communities) seems to be a strategical move of real estate developers. During field visits for the selection of gated communities I found the trend that almost all gated communities have distinct spatial features. Different monuments, architectural features or artifacts were placed at the main entrance to create spatial distinctiveness.

In case of EME, the monument of horse placed in front of the main gate is the distinct spatial feature of EME. Over the years, it has become a mark of spatial identity for the residents of EME and a source of locating EME for non-residents. Similar is the case with EDEN canal villas where a rectangular monument is placed in a fountain outside the community. The effort to create spatial distinctiveness can be found in almost all gated communities of Lahore. This certainly becomes an attraction for people towards these communities while giving the impression of spatially and aesthetically pleasing home environment. The exploration of gates sites revealed that such distinct spatial have also been placed inside the community as well. In case of Eden canal villas, a mini theater is available to conduct community activities.



Figure 50. Showing the monument placed in front of EME housing society.

It is important to mention here that Eden developers targeted the notion of providing ‘community life’ to the people. It appears that decline of social interaction within traditional home environments (non-gated communities) led people to move to other available home settings. The nostalgia for old community life is something that Eden developers have been selling since last two decades in Pakistan. The mini theater available in Eden canal villas is a spatial opportunity to invite social interaction (see Figure 51).

These spatial features not only define the identity of a particular gated community, but such spatial features also help residents to identify with their home environments. Almost all the participants from gated research sites, when asked to mention the spatial features of their gated community, mentioned these distinct features as one resident from EME said:

—Well, you must have seen the horse statue in front of main gate, it has been placed there since 1985 when this society first established. And you know that has become the identity mark for EME. We use this to tell people to locate

EME who haven't been here before. And you know horse is only placed in front of EME in Lahore, so it makes it easier for people to locate EME".

(Spatial Distinctiveness)



Figure 51. Showing the monument placed in front of Eden Canal villas and on the right side a view of mini theater.

There are findings that suggest that physical spaces can play a vital role in establishing one's social identity. The studies have been conducted to evaluate the group-relevant buildings (e.g., physical spaces relevant to one's ethnic or cultural history) and results suggest that association to such physical places is motivated by group-based affirmations (Ledgerwood & Liviatan, 2010; Ledgerwood et al., 2007). It is found that group identity helps individuals to positively evaluate a collective property or group property. Furthermore, people value a property that becomes a source of their social recognition. Such properties can help establishing group identity (Proshansky, Fabian, & Kaminoff, 1983) and in turn inculcate sense of worth in individuals associated to them (Korpela, 1989; Korpela, Hartig, Kaiser, & Fuhrer, 2001).

The present study adds to these findings and suggest that within the context of gated home spaces, resident's get an opportunity to share a collective property and a space to identify with. It is more evident in case of EME housing society, being one of the model-gated community in Lahore, participants expressed pride while saying that they own a home in an esteemed community of the city.

Psychological dimension: sense of belongingness. Within the context of residential setting (gated and non-gated) territorial attachment or attachment to place seems to play a vital role. As it has been mentioned earlier that psychological dimension of territoriality found to be more rooted in gated home spaces in the present study. The findings of present study indicates that residents of gated communities were more attached to their residential community compared to non-gated residents.

The impacts of physical attributes of a dwelling unit on place attachment has not yet been explored thoroughly (Gifford, 2007). The little research available on physical attributes of residential environment and its impact on occupants' sense of belongingness was found which indicated that permeability of street, noise and busyness of the street that can impact residents' sense of attachment. It was found that busy streets discourage sense of belongingness by restricting *space appropriation*, the concept that explains that outdoor area is for the use of residents and not for strangers who are merely passing by (Brown & Werner, 1985; Pinet, 1988). Furthermore, the research in design psychology found that new urban communities with prominent physical attributes of providing main streets and access to amenities tend to have greater sense of belonging and sense of community compared to traditionally high-density neighborhoods (Pendola & Gen, 2008).

Consistent with the previous research the present study found that physical attributes of home environments (gated and non-gated) significantly impact the resident's sense of belongingness and territorial attachment.

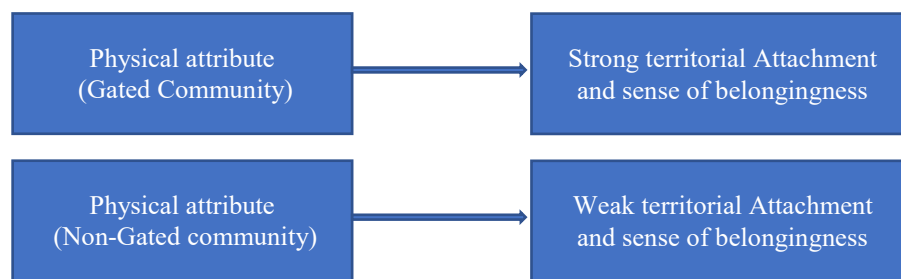


Figure 52. Showing the two physical attributes (gated and non-gated) and their impact on territorial attachment.

Within the context of gated research sites, the findings revealed that resident's sense of belongingness is dependent on the territorial attachment (physical setting) and territorial attachment (social setting).

Territorial attachment (physical setting). The territorial attachment to physical setting is manifested in three themes: care taking attitudes, perception of place and, commitment to place. In the present study it is found that territorial attachment helps residents to view their near home space (Tayler & Brower, 1985) as extension of their home. In other words, it was found that within the context of gated research sites the participants territorial attachment was not only strong but it also seems to have increased the psychological significance of near home territory (gated community) for them.

Territorial attachment (physical setting): Care taking attitude. In present study the residents Care taking attitude towards the home space and available spatial resources impacts the territorial attachment. Gated communities offer its residents an

opportunity to live in a territorially organized environment by providing spatial resources and other amenities. The findings from both gated sites revealed that residents of gated communities are more conscious of the resources available in their community. the findings revealed that participants with positive territorial attachment tend to show more care taking attitude towards their residential community compared to the participants with negative territorial attachment.

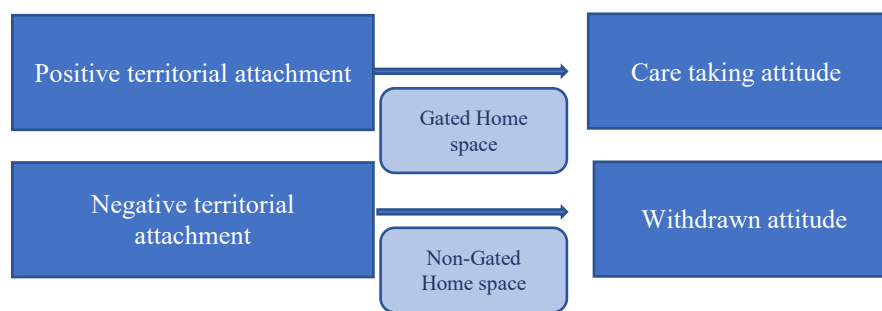


Figure 53. Showing the patterns of territorial attachment and care taking attitude within gated and non-gated research sites.

The findings on territorial attachment within gated and non-gated research sites revealed a contrasting pattern. The participants of gated sites have positive territorial attachment towards their residential community which manifested in their care taking attitudes towards the spatial resources available within community. on the other hand, participants from non-gated research sites showed negative territorial attachment towards the spatial resources of their communities.

Within the context of gated home spaces, it is found that resident's care taking attitude was dependent on the responsiveness of community's management. In both gated research sites, the management was actively providing the facilities to the residents. in case of EME housing society management was more professional whereas, in Eden canal villas the management was operating on more personal and

less professional manner. The reason of the difference is directly related to the size of the community. Eden canal villas being a geographically small size community seem to be functioning well with the personal approach of management.

Previous research suggests that attachment to physical setting vary on different spatial scales (Lewicka, 2011). The phenomenon of place attachment has been investigated by community psychologists on neighborhood level and it is found that in U-shaped (cul-de-sec) streets the place attachment is more apparent (Hidalgo & Hernandez, 2001; Hernandez, Hidalgo, Salazar Laplace & Hess, 2007). Cul-de-sec or U-shaped Street designs are used by urban designers, these streets have same entry and exit point. Cul-de-sec street designs were used to make streets less permeable and safe for the residents. the present study contributes to these findings and reveals that gated home spaces being less permeable and territorially organized place give opportunity to its residents to bond and identify with these communities and could be regarded as an upgrade version of cul-de-sec in urban residential design.

It is important to mention here that in both gated research sites the data on territorial attachment revealed residents' positive attachment towards their gated community. the difference was found in the intensity of territorial attachment and its impact on care taking attitude.



Figure 54. Showing the patterns of strong and weak territorial attachment and care taking attitude within gated research sites.

Participants with strong territorial attachment have more care taking attitudes towards their gated community in general and towards the spatial resources as one participant from EME housing society said:

–This happened many times that the grass in the park was not maintained properly especially in rainy season and I found it dangerous for children, so I made a call to main office to send the Gardner to maintain it and the management is good in responding our calls and that efficiency is difficult to find in other gated communities I guess” (taking action)

On the other hand, participants with weak territorial attachment have less care taking attitudes. Even the participants with weak territorial attachment did not express absence of care taking attitude towards their gated community, the difference was in the action taken by residents. participants with strong territorial attachment acted to either directly call the maintenance personnel or report it to the management. On the other hand, the participants with weak territorial attachment though showed concern over the poor upkeep of spatial resources but tend to show withdrawn attitude and refrain from calling the relevant person or report it to the management. One participant from Eden canal villas said:

–We have a small market in our community and many times I have seen the garbage and wrappers in front of the market and rotten smell of vegetables and fruits really bother me but what can I do it’s a market and I thought of reporting this but then I stopped because I suspected that management will make fun of this complain because you know markets are supposed to smell I guess”(withdrawn attitude)

Territorial attachment (physical setting): Perception of residential community.

The findings revealed that the perception of residential community impacts residents' territorial attachment to their residential community. Within the context of gated home spaces, the findings suggest that the positive perception of gated community in the eyes of residents leads to positive territorial attachment. In both gated sites, the data revealed that the residents of gated communities perceive their gated home space as a privileged living.

Within the context of EME housing society, the residents took pride in their community. It was evident from the participants' account that they were aware of the positive perception of EME among public. As one female participant from EME said:

—Well, you can ask anyone in Lahore and people will tell you that EME is the model gated community. When we were looking for different residential areas in city to buy home and visited EME, I told my husband that this is it and we bought plot here and then build our home and I think that's the best decision we made" (prideful)

One male participant from EME expressed the similar notion:

—You know this is one of the oldest gated communities. It was established in 1985 I guess, and I shifted here in late 90's, and I have seen adjacent gated communities being established right before my eyes and now as you know there are dozens of gated communities on this road, but you might have noticed that none of the other gated establishment is as good (facilities and security wise) as EME. You know you can ask people this and they will tell you that everybody in Lahore wants to shift here" (Grandiose and prideful)

When describing their gated community, the account of participants from EME clearly indicated the grandiose prideful perception of their gated home space. Such positive perception of residential unit helps residents in establishing the bond and attachment to their home space.

The positive perception of the residential space was also present in Eden canal villas, but the participants account contained more intimate or affective connotations. This could be due to the fact the Eden canal villas is a geographically and densely small community and as result community ties were more personal in nature. While describing the residential unit one male participant from Eden canal villas said:

—Well, I like the fact that it's a small community, although, my interaction with other residents is not very frequent but my mother visits neighbors on regular basis and through her I get acquainted with many residents. I like the fact that women in our community interact on regular basis and because it's a small community so you don't have to rely on vehicles to roam around like in EME [is geographically large community], I can visit my community from one end to another in 10, 15 minutes” (Affective account)

A female participant from Eden canal villas also said:

—Compared to other gated communities on this road our society is a small one, and I like the fact that it's small community roads do not allow speeding within society, so I feel my children are safe outside the home. Its wholesome community and I like it here” (Affective account)

It is evident that positive perception of residential community facilitates the positive territorial attachment within gated home environment.

Territorial attachment (physical setting): Commitment to residential community. The findings revealed that commitment to one's residential community is another factor for territorial attachment. Resident's willingness to stay in a particular community for a longer period reflects their trust towards their residential community. It was found that territorially organized gated living by providing the necessary resources to sustain household is an important ingredient to make residents view their gated living as long-term residence.

Within the context of gated research sites, the findings revealed that residents of gated communities expressed their satisfaction over the resources available in their respective communities. Although Eden canal villas is a small community and available resources are also small scale compared to EME housing society, but Eden's residents seem to enjoy the small knit community benefits. Another factor that could have mediated the small-scale resources is that a high-end shopping mall (Metro cash & Carry) is situated on opposite road at five minutes' drive from Eden. One male participant from Eden said:

—We have a small market inside the community, and we can buy groceries and other things but unlike EME we don't have pharmacies, banks, restaurants, and big market. But you know the Metro [shopping mall] is very near and is on walking distance, and you can buy everything from one place”
(nearby resource)

It is important to mention here that the available nearby resources is not the only factor for people's commitment to their home environment. If this were to be true, then the participants of non-gated communities would show trust and commitment towards their home environment as well. The spatial resources in both

non-gated sites were available, but they were nonexclusive to the residents and yet failed to invoke trust in residents of non-gated communities (discussed in previous section of spatial resources). So, within the context of gated communities the nearby resources can be considered as added benefit but not the sole reason of territorial commitment.

The analysis also exhibited that people not only committed to their respective gated community, but they also expressed their commitment to the notion of gated living arrangement. None of the resident expressed the desire to move into open communities despite the fact that almost all of the participants moved to gated developments from open communities. Participants while sharing their residential experiences, displayed major reasons of their mobility to new places as crowding, encroachment, lack of privacy (heterogeneous neighborhood) and unreliable basic household resources (shortage and delay of energy resource, weak security) in a significant manner.

Territorial attachment (social setting). Consistent with the theoretical notion given by Taylor (1988) that social factors along with physical attributes of a place play an important role in establishing territorial attitudes. Within the context of gated home environment, the functionality of social resources (see detail in previous section) impacts residents' territorial attachment towards their residential community. in both gated research sites, it was observed that the social homogeneity, social cohesion, and locally embedded culture within these communities seem to have facilitated the territorial attachment. Homogeneous social setting of gated communities provides conducive social conditions for residents to engage in

predictable social interaction and avoid unwanted social interaction (insider/outsider distinction).

It was found that predictable social interaction increases the likelihood of neighborly ties and resident's participation in different social activities within gated home spaces. Predictable social interaction also increases the likelihood for residents to take social initiatives, for example kitty parties, women religious gatherings, match making WhatsApp groups, formation of residents committee were found in both gated sites.

It appears that a good territorially rich gated home space can provide socio-spatial conditions that can lead to residents' positive territorial attachment to their residential community. It is important to mention here that there are dozens of gated communities in Lahore and two research sites that were selected for this study had territorially rich environment (active physical markers and less permeability). According to Taylor (1988) physical, social, and interpersonal factors can influence the territoriality within a territory, so it is quite possible that with the change of physical attributes and social conditions in other gated communities would yield different results.

Psychological dimension: Territorial control. The territorial control has been considered as one of the key factors for territoriality across all disciplines. Within the field of geography, Robert Sack (1986) demonstrated the social relational importance of territorial control. Edney (1975) in the field of environment behavior studies was the first one who explored the territorial control behaviors in college dormitories among students.

As the research on human territoriality evolved the concept of territorial control also evolved. Initially territorial control was studied as humans' overt behavior toward a territory, gradually the researchers started exploring the implicit meanings of territorial control as well and the term perceived control emerged. The exploration of implicit meanings of territorial control led researchers to find the affective, cognitive meanings that humans associate to territorially controlled behaviors. It was found that humans develop cognitive, affective ties to things, objects, and places. Many psychological variables are involved in Perceived control of space, including identity, ownership, and competence (Brown, 1987; Xu, 2015). Altman (1975) first identified the types of territories (primary, secondary, and public) and differentiated them based on their psychological significance. Primary territory like home is considered more psychologically significant and central in individual's life. Subsequently, individual's increased perceived control is associated with primary territories and as the individual move from home territory to less central territory the perceived control decreases (Altman, 1975; Taylor, 1978).

The concept of *centrality* came from Lewin (1946) who said that some places play more pivotal role in individual's life than others. Altman (1975) reintroduced this concept in environmental psychology and identified the types of territories, but his definition of centrality revolved around the types of people encountered in a territory (like encounter with family members in home territory). Taylor (1988) on the other hand focused on the setting as a supportive context in centrality and believed that the places whose loss and whose disruption can bring stress and upset in everyday life of an individual are more central and desired control is high on these places.

Consistent with the above presented theoretical notions of centrality and control the present research found that home environments are spaces that contain psychological significance. Data from both gated and non-gated research sites revealed that desire to attain control of immediate home space was present in participants of both residential communities. Participants from non-gated communities expressed their dissatisfaction over the lack of control in their immediate home space. On the other hand, data from gated communities revealed a 'group dynamic of control' in which both individual resident and group agency (local management) shared the control of space.

It has been rationalized for the present study that gated communities are 'territorially rich spaces and these spaces were established to attain control of space. If we see the phenomenon of gated communities within the context of Lahore, Pakistan, the Tayler's notion of centrality seems to fit. As it has been discussed earlier in this chapter the participants mentioned the reasons of moving to gated communities was disruption of everyday life in non-gated communities (lack of control, crowding, encroachment, unwanted social interaction, nonexclusive resources, inactive management etc.). It was evident from participants account that the shift from non-gated to gated communities in Lahore was due to the stress caused by the disruption of everyday life in non-gated home spaces. Over the years, as social ties became weak residents of non-gated communities felt insecure in the heterogeneous social environment. it could be deduced from participant's accounts that the 'dense social ties' and 'dense knit community' were major reasons for residents of non-gated communities to feel secure. The data from non-gated sites confirmed this notion as residents of non-gated communities expressed the similar issues they are facing today

and the desire to move to a gated home space is high in participants of non-gated communities.

Home and near home territories according to Taylor & Brower (1985) are central territories in an individual's life and any threat or disruption in these territories manifest in increased desired control.

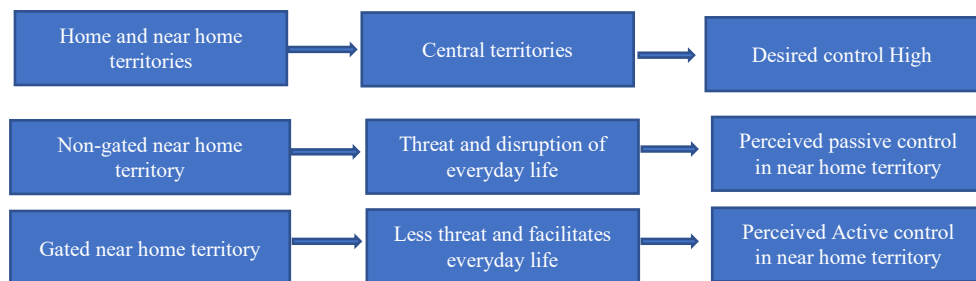


Figure 55. Projecting the centrality of near home territories (Taylor & Brower, 1985) and its impact on spatial control within gated and non-gated near home territories.

In this section, perceived territorial control will be discussed with reference to two home environments (gated and non-gated). The resident's ability to perceive 'active or passive territorial control' within gated and non-gated home environments will be discussed.

Perceived territorial control within Gated home space. Within the context of gated home spaces, the perceived territorial control manifested in resident's sense of freedom to use spatial resources and sense of privilege over these resources. While

living in a territorially organized home space, the residents of gated communities perceived active control over their residential space. Consistent with the Taylor's (1988) conceptualization that in near home spaces the territorial control is being achieved through individual agency' (personal resources of an individual) or group agency' (occupants' collective effort or through city municipal). Within the context of gated home spaces, the present study revealed that to attain the collective territorial control of space both residents and communities' management act as a group agency and residents also exert control on individual level.

Perceived active territorial control within Gated home space. The findings revealed that the residents of gated communities exert control over their home space through both individual and group level. Participants who perceived themselves as an active agent in their residential community tend to exert control with direct intervention to any suspicious or uncivil activity. On the other hand, participants who have mutual sense of responsibility and perceive that two parties (resident and community's management) are active agents to attain control in their home space tend to opt for indirect intervention by reporting any suspicious activity to the community's management.

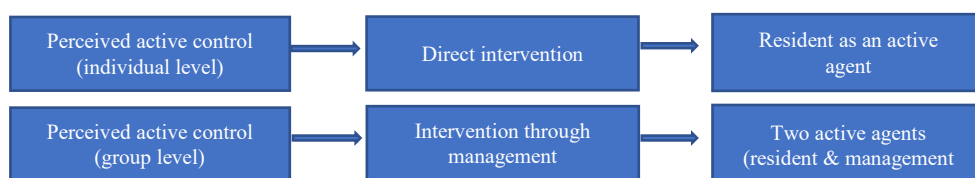


Figure 56. Showing the pattern of perceived active control on both individual and group level within gated research sites.

Perceived passive territorial control within Gated home space. Findings revealed that participants with passive territorial control tend to withdraw from spatial resources available in their gated home spaces. Within the gated home spaces perceived passive territorial control is also found on both individual and group level. Participants with perceived passive control tend to disengage themselves from spatial resources or use them with the sense of less privilege and freedom compared to the participants with perceived active control. It is important to mention here that passive control within gated communities does not mean no control. Here passive control does not mean resident's indifferent attitude towards suspicious or uncivil activity (as was the case in non-gated communities), rather passive control (individual level) was assigned to the participants who witnessed some suspicious or uncivil activity and report it to the management but did not bother to take follow up.

On the other hand, passive territorial control (group level) within gated research sites revealed that participants who perceive their gated management as authoritative entity and feel unheard by the management took on passive role and withdraw from spatial resources or other community activities.

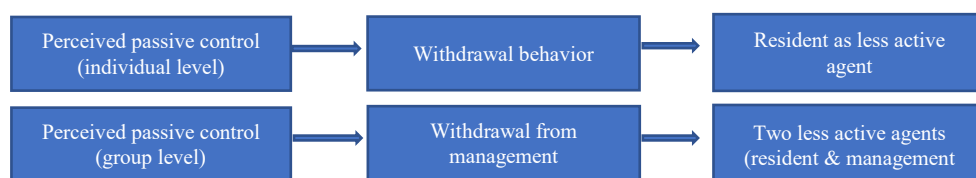


Figure 57. Showing the pattern of perceived passive control on both individual and group level within gated research sites.

Territorial control within non-gated home space. It is evident from the findings of the present study that participants from non-gated research sites reported no control over their residential community. Participants from both non-gated research sites (Allama Iqbal town and DHA) reported that they experience no control outside the boundary of their homes. Participants of non-gated communities act as a passive agent in their environment. The constant threat of unwanted social interaction and highly permeable physical environments and inactive or non-existent local management tend to impact residents' sense of control within non-gated home environments.

It is evident from the findings of the present study that non-gated near home territory does not allow residents to exert active territorial control. Consequently, residents of non-gated communities tend to withdraw from their residential space. Consistent with the Tayler & Brower's (1985) theoretical guidelines the findings of present study suggest that within non-gated communities of Lahore the physical and social heterogeneous setting do not allow residents to exert control in their immediate home spaces. Behaviors like walking on sidewalks after dark, letting children play in streets or parks without supervision, and using spatial resources with the sense of privilege were not present in participants of non-gated home spaces.

Psychological dimension: Sense of home. Human territoriality research has been very closely linked to the concept of home. Researchers from human geography have been considering home territory as an important place (core territory) in individuals' life and using it as an example to explain the phenomenon of human territoriality (Porteous, 1976; Sack, 1986). Within the domain of environmental psychology, the territorial models introduced by many scholars have also identified

home as a primary territory (Altman, 1975; Altman & Chemers, 1980; Brower, 1965), home is identified as a 'primary territory' which is central to the resident's life and reflects in individuals account of emotional connotations attach to it.

It has been explored that home being a primary territory contains emotional and psychological meaning of possessiveness and exclusiveness. On behavioral level personalization of space and demarcation of home territory are the prominent territorial behaviors that have been explored to understand the territorial meanings of home environments in last few decades (Xu, 2015; Harris & Brown, 1996; Hirschon & Gold, 1982; Sebba & Churchman, 1983).

During the last two decades, territorial understanding of home environments and emotional, affective, or cognitive bonds residents established with their home territory have been promoted by the interdisciplinary discourses of place identity (Proshansky, 1972; Proshansky, Fabian, & Kaminoff, 1983) and place attachment (Altman & Low, 1992).

In the growing literature on subjective interpretation of home, it has been identified that the residents experience and imagination many not perfectly align with the physical attributes of residential unit. The difference between home and house has been debated (Lawrence, 1987; Saegert, 1985). The studies from human geography and phenomenological studies from psychology have identified that the concept of home is being perceived as an existential state, which is mostly used to refer to the range of places as home other than actual home (Manzo, 2003). In the physical-spatial sense, home as residence is a human habitat and the physical-spatial range of home differs from the conceptual or imagined range of home (Oswald & Wahl, 2005;

Sixsmith & Sixsmith, 1991; Sixsmith, 1986). In other words, *–home does not end at the front door but rather extends beyond* (Taylor & Brower, 1985)”.

The present study followed the theoretical conceptualization given by Taylor & Brower (1985) that near home spaces contain psychological significance. In the present study two near home or immediate home spaces are explored (gated and non-gated), and for the present study it was assumed that gated home spaces being ‘territorially rich environment’ would contain more psychological significance than non-gated home spaces. The present study confirms this notion, and it is found that the residents of gated home spaces project their ‘home like feelings’ onto their residential community.

It was conceptualized for the present study that two physical layouts of home environments ‘territorially rich environment’ (gated near home space) and ‘territorially lacked environment’ (non-gated near home space) will impact the psychological significance of near home territory. Within the context of gated home environments, the present study confirms that the deployment of territorial tactics in gated communities increase the psychological significance of near home territory. Contrary to this, the findings from non-gated research sites revealed that territorially lacked environment of non-gated communities decrease the psychological significance of near home territory.

It is important to understand here that the withdrawal attitude of residents of non-gated communities from immediate home spaces, could not be translated into the absence of psychological significance of near home territory. Their discomfort over highly permeable residential space, withdrawal behavior from spatial and social resources, dissatisfaction over heterogenous social conditions and their desire to move

to a more organized gated home space show the psychological significance of near home territory.

Within the context of gated home spaces, a model of ‘home like’ feelings projected towards gated near home territory is derived from the data of gated research sites. The model presents the ‘home like feelings’ in a continuum. At the strong end of sense of home are positive feelings which represent the notion of gated community as ‘extended communal home’ in the eyes of the participants. Themes of strong sense of home represent the more intimate or affective connotation which appear to be facilitating residents to view their gated community as ‘collective home territory’. On the other end of the continuum, the weak sense of home represents not the absence of homely feelings but the weak perception of homely feelings towards gated community (see detail in result chapter).

Perception of territory: Territorial cognition (factors that shape the meaning of place, the image of place, and how a particular territory is perceived). In Taylor's explanation of the human territorial functioning model, cultural, social, interpersonal, and physical variable influence individuals’, and groups' perceptions of territory.

These factors shape the meaning or image of a particular location (Taylor, 1988). Consistent with the theoretical assumption taken from Taylor’s work, the present study found that the perception of residential community depends on the physical, social, and locally embedded cultural norms.

Two physical layouts of residential built environment (gated and non-gated) are explored in present research, and it is found that the physical attributes of a space

significantly impact the territorial sense of the occupants. Other than physical attributes, socio-cultural and interpersonal factors were found to play a vital role in forming territorial perception of residents of gated and non-gated home environments.

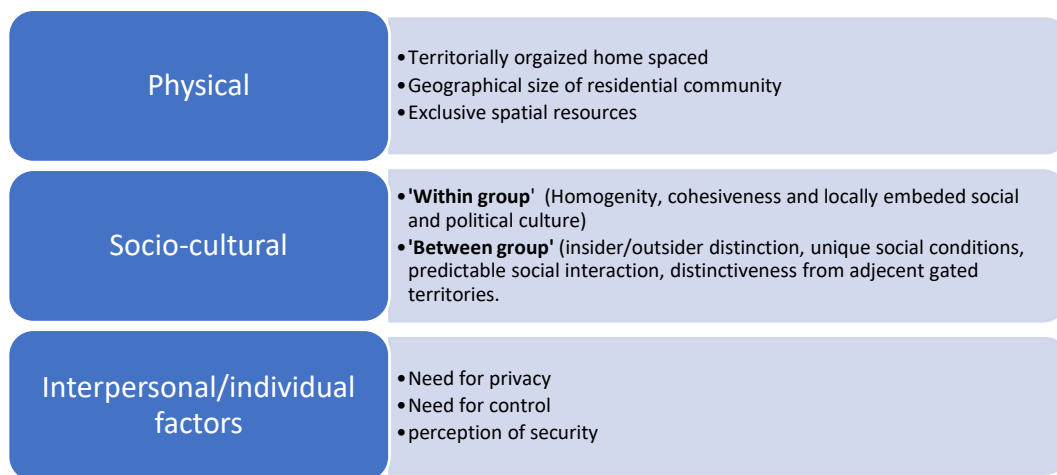


Figure 58. Showing the physical, socio-cultural, and interpersonal/ individual factors that impact territorial perception of residents within gated research sites.

Spatial-physical factors within gated home environments. The present study confirms the theoretical notion given by Taylor (1988), that physical, socio-cultural, and interpersonal factors within a territory help in shaping the individual and group's perception of territory. Within the context of gated home space, it is found that physical attributes of gated residential unit impact the territorial meanings residents draw from their respective gated community. It has been discussed earlier in this chapter that both gated research sites were territorially rich environments, the only significant difference was the geographical size of two communities.

EME is significantly large community with large scale spatial resources and sophisticated physical markers has earned the reputation of model gated community among populous of Lahore, Pakistan. This general perception of community seems to have impact on EME residents' perception of their community as well, which translated into their prideful accounts (Everyone knows EME, our community is model community etc.).

Compared to this, a humbler perception of community came from the participants of Eden canal villas, who view their community as a small but wholesome home environment. The present study revealed that the geographical size of residential community impacts the social ties and community life within residential unit.

Taylor (1988) in his model of territorial functioning said that territorial functioning mostly occurs only in small groups or face to face group interactions (microlevel) rather than neighborhood group levels (meso level). The findings of the present study contradict this notion as in gated home spaces the territorial perception and territorial behaviors were observed and reported by the participants. Although, significant difference in geographical size of two gated research sites was present but, in both sites, the territorial behaviors and territorial perceptions were apparent. Oya (2019) in her thesis of *territorial functioning on residential scale* also explored territorial functioning on meso level and found that territorial functioning can also occur in neighborhood scale.

In the present study, two physical layouts of urban residential environment (gated and non-gated) were explored, and it was found that physical attributes (permeability of home space, spatial resources, and territorial physical markers) play an important role in shaping residents' territorial cognition (perception of residential community, image of residential space and territorial sense of residential unit).

Socio-cultural factors within gated home environments. Territorially organized home environment of gated communities facilitates homogeneous social conditions which appear to enhance the psychological significance of gated home environment. Findings from both gated research sites revealed that homogeneity and

cohesiveness in gated communities facilitate social interaction among residents and in turn increases potential for social bond and neighborly ties among residents. Furthermore, the findings also uncovered the locally embedded cultural norms (like women gatherings and virtual groups, club meetings, and residents committee) in both gated sites which were absent in non-gated research sites. It is safe to conclude from present study that within the context of Lahore, Pakistan the gated residential communities provide a stage of conducive social conditions that can facilitate social interaction among residents and among residents and community's management as well.

Interpersonal/ individual factors within gated home environments.

Consistent with Taylor's (1988) territorial functioning model, the present research confirms that individuals differ in their need for privacy, control, and security within a territory. Within two gated research sites it was found that the gated home spaces provide an opportunity to own a home in private, territorially controlled, and secured environment and majority of participants verbalized these personal preferences as the reason of their mobility in gated communities. It is safe to conclude that individuals with high need of privacy, control or security would attract in these gated home spaces. Contrary discourse was found in non-gated sites, where participants dissatisfaction since their residential community was unable to meet their need for privacy, security, and control. It has been discussed earlier in this chapter that over the years technology has replaced human social interaction, and the lack of social ties in non-gated communities have significantly impacted the resident's quality of life. Reliance on technology in general might have increased the need for a private controlled home environment in urban people and since the gated home environments

offer these qualities it is not surprising that in last two decades the city of Lahore has seen the spread of gated communities. The number of citizens moving to these communities and desiring to move to these communities indicate the preference of people to attain private and controlled space for home.

Conclusion and emergent explanatory model of residential territoriality.

The very act of inhabitation is territorial in nature and requires occupation and control of space (Habraken, 2000). Territorially organizing the space is one of the instinctual and historic behavior of humans towards their environment. In this regard, the concept of territoriality, which is the focus of the present study, is the instrument to understand human-environment relation. This dissertation makes advances in the concept of territorial functional (Taylor, 1988; Taylor & Brower, 1985) and centrality continuum in the home environment (Altman, 1975; Taylor, 1988; Taylor & Brower, 1985). Taylor and Altman's theories on residential territoriality are the prominent work available in environmental psychology till date, the theoretical advancement and empirical investigation of these theories have largely been dormant due to the interdisciplinary nature of the construct and obvious conceptual and methodological issues (Xu, 2015).

First, Taylor (1988) claimed that territorial functioning is highly place specific. Corresponding to this notion, the present study revealed that the different urban residential physical layout (gated and non-gated) reveals different form of territorialities. The findings of the present research indicate that physical attributes of residential environment significantly impact the territorial understanding of residents. Secondly, the exploration of residential territoriality within gated and non-gated home environments revealed that the spatial scale for territorial functioning is not fixed and

the present study proves that territorial functioning occurs on meso level (neighborhood level) the finding negates the Taylor's notion that territorial functioning occurs in small groups with the possibility of face-to-face social interaction.

Exploration of territoriality within gated and non-gated home environments revealed that residents' experiences embedded in their home environment (situated experiences) generate different forms of territorial understanding among residents of a particular residential community. The constant comparison of two physical layouts of home environments (gated and non-gated) revealed the potent influence of the 'territorial organization of space'. Gated communities for the present study were conceptualized as 'territorially rich home environments' with particular territorial physical attributes, whereas non-gated communities were conceptualized as 'territorially lacked home environments' with minimal territorial attributes present. The findings of the present study revealed that gated home environments are not only territorially organized spaces, but this territorial organization turns residential space into a 'smaller unit of community', which successfully inculcates the 'extended home' sense in its residents, towards their residential community.

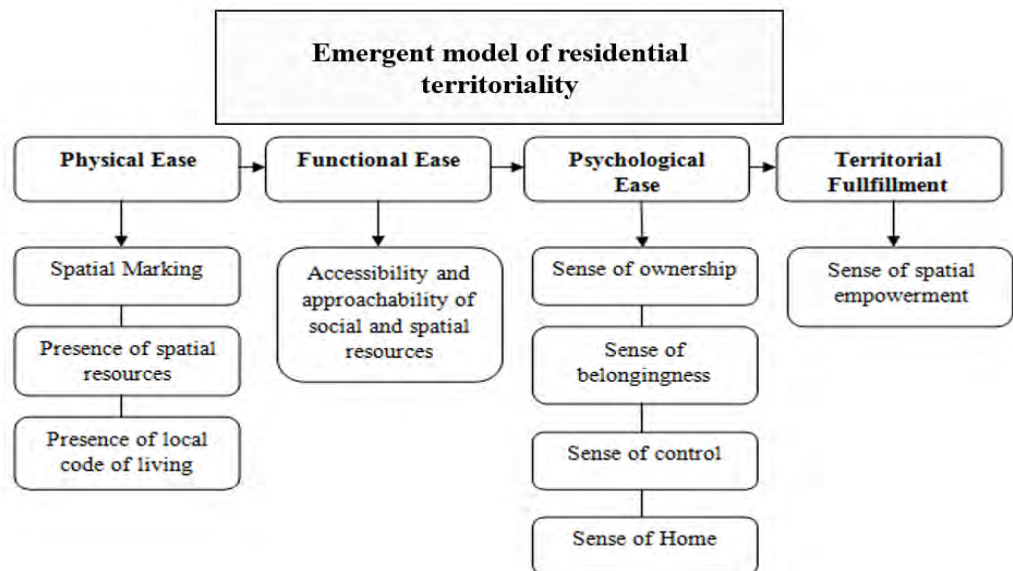


Figure 59. Showing the emergent explanatory model of residential territoriality

Emergent model of residential territoriality was developed through rigorous analysis of emergent categories and constant cross comparison of emergent themes. The exploration two home environments (gated and non-gated) revealed that the spatial, socio-cultural, and political contexts being produced by residential communities either facilitates or hinders territorial sense making among its residents and in turn, either enhances or decreases psychological significance of residential community (near home space). The investigation of home environments (gated and non-gated) of Lahore, Pakistan revealed that residential communities vary in physical attributes and design of space impacts certain psychological processes.

It was found that within home environments, people construct or seek out certain physical environmental attributes that could promote their psychological motives and desires. Within the context of Lahore, it appears that citizens of Lahore prefer their home vicinity territorially organized one. It is concluded in the present

research that gated communities offer a more 'territorially organized living' compared to non-gated communities for obvious reasons. The rapid growth of gated communities on the out skirt of Lahore in last two decades and citizens rapid mobility into these territorially rich residential enclaves, are the proof of people desire of organized living environment.

The present research found that gated communities while offering 'territorially organized home environment' provide an opportunity to the residents to satisfy their spatial (ideal home space, resource convenience) and psychological needs (attachment, belongingness, and sense of home). The residential model of home environments contains four interlinked patterns of 'Ease' associated with home spaces: Physical ease, functional ease, psychological ease, and territorial fulfillment.

Physical ease is defined as 'the degree to which any home space offers desirable spatial structure and basic amenities to sustain a household in that environment'. This became clear from the analysis that physical ease was the first component that people tend to look for in their home environments. The home environment which can offer basic amenities and spatial resources to sustain a household brings physical ease. The notion was supported by analyzing the data of gated communities, where territorial organization of space and availability of spatial resources had put residents into a state of ease about the security, safety, and sustainability of their house units (relief of having house in a secure surrounding).

Functional ease is the second component, having house in a secure surrounding (here in case of gated communities) put one at physical ease (house unit is safe), now the question arises if the resources available in-home environments are functional or not? In the present dissertation, the functional ease is defined as 'the

degree to which a home environment provide opportunity to its residents to use available spatial, social and legislative resources with comfort'. It was apparent from the comparative analysis of two home environments that the residents of gated communities were enjoying the physical and functional ease regarding their residential space on much higher level than the residents of non-gated communities.

If residents feel physical and functional ease within their home space it paves way for the psychological ease. Psychological ease is defined as 'the state of ease the individual resident experiences while living in any home environment'. The psychological ease is manifested in psychological processes of territorial ownership, sense of belongingness, territorial control, and sense of home. Territorial fulfillment is the conceptual category that was developed by rigorous comparative analysis and critical understanding of data and manifested in resident's sense of spatial empowerment. Spatial satisfaction and trust towards home environment can lead residents to stay in that space for longer period. Residents desire to view their home community as 'long-terms residence' show their trust and satisfaction over their residential community.

The emergent model of residential territoriality proposes that if a home environment bring its occupants the physical and functional ease that would facilitate the psychological process of spatial bonding, territorial ownership, territorial control, and homely feeling towards their home environment, which ultimately could lead to the spatial empowerment (satisfaction and trust over home environment). The researcher counter intuitively proposes that the present model can be applied to a variety of habitable physical environments. To put it in simple words, any physical built environment (specifically permanent, shared or temporary home environments)

with sufficient physical and functional properties would facilitate the psychological process of spatial bond and territorial ownership etc. the concept of territorial fulfillment can vary according to the physical settings it would be investigated in, for example, in case of temporary home environments (hotel room) the good or bad reviews by the visitors could indicate their territorial satisfaction or dissatisfaction.

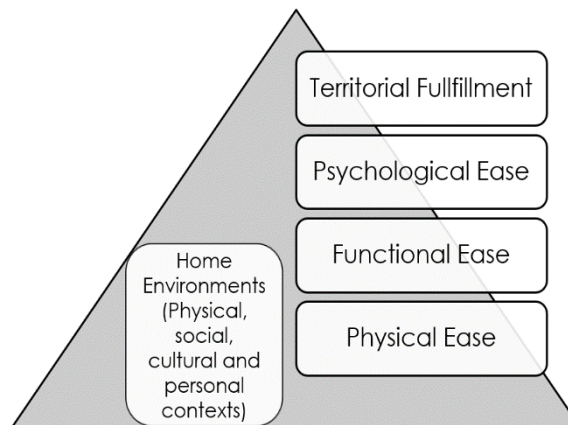


Figure 60. Showing the emergent model of residential territoriality.

Limitations

The way individual interacts and builds association with the environment surfaces through various signs on different scales leading to prominent spatial behavior within the notion of Territoriality. It is difficult to understand and analyze the multifactorial phenomenon of spatial behavior, therefore, the present research is not depicting the alliance within environmental and behavioral approaches, rather the perspective is probabilistic. The present research covers only two physical layouts of home environments (gated and non-gated) within Lahore. Although, these two home environments represent the wide range of socio-spatial aspects available in Lahore city and share many socio-spatial and economic commonalities.

There are many gated and non-gated home environments that are significantly different than the ones chosen for the present dissertation. Some examples couple be the gated home spaces for low-income population. Such gated communities have very less indoor or outdoor resources and amenities. Permeability of these communities could be higher with very few security measures and poor management by relevant real estate company. On the other hand, there are other forms of non-gated home environments available in Lahore as well, the old inner-city areas and ‘Mohalla’ system have very different spatial and social organization. The present research is limited in its exploration of different home environments with different social and spatial structures.

Furthermore, the social, cultural, spatial, and institutional aspects of selected gated research sites were relatively unique, both gated research sites had functional territorial physical markers so any effort to project the findings of the present research on to other urban home environments would be difficult. The emergent model of

residential territoriality may be inspiring for other researchers conducted on home environments in alternate geographical locations.

The overall design of built environment serves inhibitory or facilitative functioning, whereas the present research focuses more over two physical layouts of urban residency only which leads to need of investigating territorial functioning in multiple spatial layouts. Moreover, the residential environment building, designing etc. is changing rapidly owing to increased modernization and technological advancement, while the present research explored various concepts or notions based on a single time section, hence, in order to understand the environment-men alliance within notion of territoriality, it should be investigated on a wider historic spectrum.

Future Suggestions

Other than treating urban space as a separate territory, the conception of space as designed within multiple territories interlinked with each other leads to wider perspective of space. In relation to it, approaching territorial functioning within home-based concept alone cannot serve the significance of investigation at home range i.e., city scale. Therefore, it is imperative that human territorial functioning needs to be explored at the macro level of the city for future studies.

Moreover, research within multiple time sections and locals will also lead to enhanced generalizable deductions aligned with comprehensive knowledge of human territoriality functioning within physical environment. The ecological approach followed in the present dissertation highlights the importance of physical environment to gain understanding of social psychological processes occurring within a particular physical space. The ecological approaches treat physical environment as an integral

part for understanding cultural and social behaviors occurring in a particular setting (Masuda et al., 2008; Miyamoto et al., 2006; Sng et al., 2018), to understand dynamics of social relations and potential inter-group conflicts (Arriaga et al., 2004; Lohmann et al., 2003; Bou, Zeineddine, & Pratto, 2017; Brown, 2009). The present research focuses on the person-environment mutuality within ecological framework and suggests that it should be central for future researchers exploring human behavior in any physical environment.

The main emphasis of the present dissertation was to explore the role of home territories in social and psychological experiences of its occupants. The earliest literature on territories and territoriality was heavily relied within ethological discourse, which focused on “aggressive defensive behaviors”. Instead, the present research took the route of relational understanding of resident-territory relationship, which revealed the multidimensionality of the construct of human territoriality (different forms of territoriality were found across two home environments).

Already, a growing body of literature is pointing out the critical link between territorial designs and subsequent psychological and emotional experiences (Graham et al., 2015; Meagher, 2016, 2018), and identity processes (Arriaga et al., 2004; Gosling et al., 2008, Gosling et al., 2002; Ledgerwood et al., 2007; Lohmann et al., 2003). Despite the growing literature, our understanding of critical role these territories play in people’s everyday lives and the social, psychological processes embedded within physical environment is very limited. The present research shed light on the multidimensionality and relational understanding of person- environment behavior.

The present research hope to set the precedent for the future research on this less researched area of person-environment behavior specifically with reference to Pakistan. During the process of present dissertation very few indigenous research has been found that address the issues of person-environment behavior. The literature on physical environment is very limited globally (Graham et al., 2015; Meagher, 2016, 2018, 2019) and closer to non-existent within the field of psychology in Pakistan. The present dissertation is an attempt to highlight this neglected area within the field of psychology.

REFERENCES

References

- Abdullah, A., Marzbali, M. H., Bahauddin, A., & Maghsoodi, M. J. (2018). Territorial attitudes and victimisation: A tale of two neighbourhoods. *Journal of ASIAN Behavioural Studies*, 3(7), 101-109.
- Anderson, J., & Tindall, M. (1972). The concept of home range: New data for the study of territorial behavior. *Environmental design: Research and practice*, 1, 1-7.
- Alessandrini, N. (2018). Varieties of embodiment in cognitive science. *Theory & Psychology*, 28, 227-248. doi:10.1177/0959354317745589
- Altman, I., & Low, S. M. (1992). *Place attachment*. New York: Plenum Press.
- Altman, I., & Chemers, M. M. (1980). *Culture and environment*. Monterey, CA: Brooks/Cole.
- Altman, I. (1975). *The environment and social behavior*. Monterey, Calif: Books/Cole.
- Altman, I., & Low, S. M. (1992). *Place attachment*. New York: Plenum Press.
- Altman, I., & Rogoff, B. (1987). World views in psychology: Trait, interactional, organismic, and transactional perspectives. In I. Altman & D. Stokols (Eds.), *Handbook of environmental psychology* (Vol. 1, pp. 7-40). New York: Wiley.
- Arriaga, X. B., Goodfriend, W., & Lohmann, A. (2004). Beyond the individual: Concomitants of closeness in the social and physical environment. In D. J. Mashek & A. P. Aron (Eds.), *Handbook of closeness and intimacy* (pp. 287-303). Mahwah, NJ: Lawrence Erlbaum.
- Ardrey. (1966). *The territorial imperative*. New York: Atheneum.
- Badger, E., & Quoc Trung, B. (2018). How connected is your community to everywhere else in America? *The New York Times*. Retrieved from

www.nytimes.com/interactive/2018/09/19/upshot/facebookcounty-friendships.html?smid=fb-share.

- Banerjee, T., & Baer W. C. (1984). *Beyond the neighborhood unit – Residential environments and public policy*. New York: Plenum Press.
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge, Mass: Harvard University Press.
- Barker, R. G. (1968). *Ecological psychology: Concepts and methods for studying the environment of human behavior*. Stanford, CA: Stanford University Press.
- Barker, R. G. (1979). Settings of a professional lifetime. *Journal of Personality and Social Psychology*, 37, 2137-2157. doi:10.1037/0022-3514.37.12.2137
- Bartlett, F. C. (1932). *Remembering; a study in experimental and social psychology*. New York: The Macmillan Company.
- Barsalou, L. W. (1999). Perceptual symbol systems. *Behavioral and Brain Sciences*, 22, 577-660. doi:10.1017/s0140525x99002149
- Barsalou, L. W. (2008). Grounded cognition. *Annual Review of Psychology*, 59, 617-645. doi:10.1146/annurev.psych.59.103006.093639
- Bell, P. A., Fisher, J. D., Baum, A., & Greene, T. C. (1990). *Environmental psychology*. Rolt, Rinehart and Winston Inc.
- Bintliff J.L. (1999). Settlement and territory. In G. Barker (Ed.), *The Routledge companion encyclopedia of archaeology* (pp.505-545). London: Routledge.
- Blakely, E. J., & Snyder, M. G. (1999). *Fortress America: Gated communities in the United States*. Washington, DC: Brooking Institution Press.
- Bonaiuto, M., & Bonnes, M. (1996). Multiplace analysis of the urban environment. *Environment and Behavior*, 28(6), 699–747.

doi:10.1177/001391659602800601

- Bonaiuto, M., Carrus, G., Martorella, H., & Bonnes., M. (2000). Local identity processes and environmental attitudes in land use changes: The case of natural protected areas. *Journal of Economic Psychology*, 23(5), 631-653
- Bou Zeineddine, F., & Pratto, F. (2017). The need for power and the power of need: An ecological approach for political psychology. *Political Psychology*, 38(1), 3-35. doi:10.1111/pops.12389
- Bonnes, M., & Secchiaroli, G. (1995). *Environmental psychology: A psycho-social introduction*. Sage publications. London.
- Bonnes. M., Mannetti. L., Secchiaroli. G., & Tanucci. G. (1990). The city as a multi-place system: from intra-place to inter-place analysis of people-urban environment transaction. *Journal of Environmental Psychology*, 10, 37-65
- Boulding, K. E. (1956). *The image; knowledge in life and society*. Ann Arbor, University of Michigan Press.
- Brain, D. (2005). From Good Neighborhoods to Sustainable Cities: Social Science and the Social Agenda of the New Urbanism. *International Regional Science Review*, 28(2): 217- 238.
- Brunswik, E. (1934). *Wahrnehmung und Gegenstandswelt. Grundlegung einer Psychologie vom Gegenstand her*. Leipzig und Wien: F. Deuticke.(Post-doctoral thesis)
- Brunswik, E. (1957). Scope and aspects of the cognitive problem. In J.S. Bruner, E. Brunswik, L. Festinger, F. Heider, K.F. Muenzinger, C.E. Osgood, & D. Rapaport (Eds.), *Contemporary approaches to cognition* (pp. 5-31). Cambridge: Harvard University Press.

- Brower, S. (1965). The signs we learn to read. *Landscape, 15*, 9-12.
- Brower, S. N. (1980). Territory in urban settings. In I. Altman, A. Rapoport, & J. F. Wohlwill (Eds.), *Human behavior and environment: Advances in theory and research* (Vol. 4, pp.179-207). New York: Plenum Press.
- Brown, B. B., & Werner, C. M. (1985). Social cohesiveness, territoriality, and holiday decorations: The influence of cul-de-sacs. *Environment and Behavior, 17*, 539-565.
- Brown, B. B. (1987). Territoriality. In D. Stokols & I. Altman (Eds.), *Handbook of environmental psychology* (Vol. 1, pp. 505-532). New York: John Wiley & Sons.
- Brown, G., Lawrence, T. B., & Robinson, S. L. (2005). Territoriality in organizations. *Academy of Management Review, 30*, 577- 594.
- Brown, G. (2009). Claiming a corner at work: Measuring employee territoriality in their workspaces. *Journal of Environmental Psychology, 29*, 44-52. doi: doi:10.1016/j.jenvp.2008.05.004
- Brown, G., & Baer, M. (2011). Location in negotiation: Is there a home field advantage? *Organizational Behavior and Human Decision Processes, 114*, 190-200. doi:10.1016/j.obhdp.2010.10.004
- Brown, G., Crossley, C., & Robinson, S. L. (2014). Psychological ownership, territorial behavior, and being perceived as a team contributor: The critical role of trust in the work environment, *Personnel Psychology, 67*(2), 463-485.
- Bronkema, R., & Bowman, N. A. (2017). A residential paradox? Residence hall attributes and college student outcomes. *Journal of College Student Development, 58*, 624-630. doi: doi:10.1353/csd.2017.0047

- Caldeira, T. (2001). *City of walls: Crime, segregation, and citizenship in Sao Paulo*. Berkeley, CA: university of California Press.
- Calvo, P., & Gomila, T. (2008). Ecological psychology: Six principles for an embodied–embedded approach to behavior. In M. J. Richardson, K. Shockley, B. R. Fajen, M. A. Riley & M. T. Turvey (Eds.), *Handbook of cognitive science: An embodied approach* (pp. 159,161-187). Boston: Elsevier Science.
- Canter, D. (1977). *The psychology of place*. London Architectural Press.
- Canter, D. (1983). The purposive evaluation of places: A facet approach. *Environment and Behavior*, 15(6), 659-698.
- Canter, D. (1986). Putting situations in their place. In A. Furnham (Ed.), *Social behaviour in context* (pp. 208–239). Boston: Allyn & Bacon.
- Castell, P. (2010). Urban territoriality and the residential yard. In P. Castells (Ed.) *Managing yard and togetherness: Living conditions and social robustness through tenant involvement in open space management* (pp. 1-27). Gothenburg: Chalmers University of Technology.
- Casson, R. W. (1981). *Language, culture, and cognition: anthropological perspectives*. New York; London: Macmillan.
- Cassidy, T. (1997). *Environmental psychology: behavior and experience in context*. Hove, East Sussex: Psychology Press.
- Cesario, J., Plaks, J. E., Hagiwara, N., Navarrete, C. D., & Higgins, E. T. (2010). The ecology of automaticity: How situational contingencies shape action semantics and social behavior. *Psychological Science*, 21, 1311-1317. doi:10.1177/0956797610378685
- Charmaz, K. (2005). *Grounded theory in the 21st century: Applications for advancing*

- social justice studies. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (3rd ed., pp. 23-59). Thousand Oaks: SAGE Publications.
- Charmaz, K. (2006). *Constructing grounded theory*. London; Thousand Oaks, Calif.: Sage Publications.
- Craik, K.H. (1977). Multiple scientific paradigms in environmental psychology. *International Journal of Psychology*, 12, 147-57.
- Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed method approaches*. Thousand Oaks, CA: Sage Publications.
- Cooper, R. (1986). *Organization/disorganization*. *Social Science Information*, 25(2), 299–335. doi:10.1177/053901886025002001
- Coy, M. & Pohler, M . (2002). Gated communities in Latin America mega-cities: Case studies in Brazil and Argentina. *Environment and Planning B*, 29, 355-370.
- Davies, W.F (1990). Effect of Room Size on Critical Interpersonal Distance. *Perceptual and Motor Skills*, 33, 926.
- Davies, L., & McAllister, H. (2004). *Safer places: The planning system and crime prevention*. London: Office of the Deputy Prime Minister, ISBN 0 7277 3261 7.
- Denzin, N. K., & Lincoln, Y. S. (1994). Introduction: Entering the field of qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 1-18). Thousand Oaks: SAGE Publications.
- Denzin, N. K., & Lincoln, Y. S. (Eds.). (2008). *The landscape of qualitative research* (3rd ed.). Los Angeles Sage.
- Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Human

- needs and the self-determination of behavior. *Psychological Inquiry*, 11, 227-268. doi:10.1207/s15327965pli1104_01
- Du, P, Bothma, J., & Coertze, R. J. (2004). Scent-marking frequency in southern Kalahari leopards. *South African Journal of Wildlife Research*, 34, 163-169.
- Edney, J. J. (1974). Human territoriality. *Psychological Bulletin*, 81(12), 959-975.
- Edney, J. J. (1975). Territoriality and Control: A Field Experiment. *Journal of Personality and Social Psychology*, 31(6), 1108-1115.
- Easterbrook, M. J., & Vignoles, V. L. (2015). When friendship formation goes down the toilet: Design features of shared accommodation influence interpersonal bonds and well-being. *British Journal of Social Psychology*, 54, 125-139. doi:10.1111/bjso.12062
- Evans, G. W., & Saegert, S. (2000). Residential crowding in the context of inner city poverty. In S. Wapner, J. Demick, T. Yamamoto, & H. Minami (Eds.), *Theoretical perspectives in environment-behavior research: Underlying assumptions, research problems, and methodologies* (pp. 247–267). Kluwer Academic Publishers. https://doi.org/10.1007/978-1-4615-4701-3_20
- Farhat, K., Waseem, L., Khan, A., & Baig, S. (2018). Spatiotemporal Demographic Trends and Land Use Dynamics of Metropolitan Lahore. *Journal of History Culture and Art Research*, 7(5), 92-102. doi:http://dx.doi.org/10.7596/taksad.v7i5.1774
- Festinger, L., Schachter, S., & Back, K. (1950). *Social pressures in informal groups: A study of human factors in housing*. Harper.
- Farkisch, H., Ahmadi, V., & Che-Ani, A. I. (2015). Evaluation of neighborhood

- center attributes on resident's territoriality and sense of belonging a case study in Boshrooyeh, Iran. *Habitat International*, 49, 56–64.
<http://doi.org/10.1016/j.habitatint.2015.05.012>
- Fraser, D. (2000). Inventing oasis: Luxury housing advertisements and reconfiguring domestic space in Shanghai. In D. S. Davis (ed.), *The consumer revolution in urban China*. Berkeley, CA: University of California Press.
- Gitterman, A & Germain, B (2008). *The life model of social work practice: advances in theory and practice*. New York: Columbia university press.
- Gibson, E., & Rader, N. (1979). Attention: The perceiver as performer. In G. A. Hale & M. Lewis (Eds.), *Attention and cognitive development* (pp. 1-21). New York, NY: Plenum Publishing Corporation. doi:10.1007/978-1-4613-2985-5_1.
- Gibson, J. J. (1966). *The senses considered as perceptual systems*. Boston, MA: Houghton-Mifflin
- Gibson, J. J. (1979). *The ecological approach to visual perception*. Boston, MA: Houghton-Mifflin
- Gifford, R. (1997). *Environmental psychology: Principles and practice* (2nd ed.). Boston: Allyn & Bacon.
- Gifford, R (2007). Environmental psychology and sustainable development: Expansion, maturation, and challenges. *Journal of Social Issues*, 63(1), 199–212.
- Giuliani, M. V. (1991). Towards an analysis of mental representations of attachment to the home. *Journal of Architectural and Planning Research*, 8(2), 133–146.
- Glasze, G., Webster, C., & Frantz, K. (2006). *Private cities global and local*

- perspectives*. London; New York: Routledge
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory; strategies for qualitative research*. Chicago: Aldine Pub. Co.
- Gold, J. R. (1982). Territoriality and human spatial behavior. *Progress in Human Geography*, 6(1), 44-67.
- Goffman, E. 1971. *Relations in public: Microstudies of the public order*. New York: Harper and Row.
- Gray, M; Coates, J & Hetherington, T (2013). *Decolonizing social work*. England: Ashgate Publishing Limited.
- Greeno, J. G. (1994). Gibson's affordances. *Psychological Review*, 101(2), 7p.
- Greeno, J. G., & Moore, J. L. (1993). Situativity and symbols - Response to Vera and Simon. *Cognitive Science*, 17(1), 49-59.
- Greenbaum, P. E. & Greenbaum, S. D. (1981). Territorial personalization group identity and social interaction in a Slavic-American neighborhood. *Environment and Behavior*, 13(5), 574-589.
- Graham, L. T., Gosling, S. D., & Travis, C. K. (2015). The psychology of home environments: A call for research on residential space. *Perspectives on Psychological Science*, 10, 346-356. doi:10.1177/1745691615576761
- Groat, L. N., & Wang, D. (2002). *Architectural research methods*. New York: J. Wiley.
- Gold, J. R. (1982). Territoriality and human spatial behavior. *Progress in Human Geography*, 6(1), 44-67.
- Gosling, S. D., Ko, S. J., Mannarelli, T., & Morris, M. E. (2002). A room with a cue: Personality judgments based on offices and bedrooms. *Journal of Personality*

- and Social Psychology*, 82, 379-398. doi:10.1037/0022-3514.82.3.379
- Gosling, S. D., Gaddis, S., & Vazire, S. (2008). First impressions based on the environments we create and inhabit. In N. Ambady & J. J. Skowronski (Eds.), *First impressions* (pp. 334-356). New York, NY: Guilford Press.
- Hall, E. T. (1966). *The hidden dimension*. Garden City, NY: Doubleday.
- Hall, E. T. (1969). *The hidden dimension*. New York: Anchor.
- Hamama, B. (2020, May 20). *Gated communities and their impeccable role curbing the spread of Covid-19 in China*. Architettura.com. <https://ilgiornaledellarchitettura.com/2020/05/20/gated-communities-and-their-impeccable-role-curbing-the-spread-of-covid-19-in-china/>
- Habraken, N. J. (2000). *The structure of the ordinary: Form and control in the built environment*. New York: MIT press.
- Hauge, Å. L. (2007). *Identity and place: A critical comparison of three identity theories*. *Architectural Science Review*, 50(1), 44–51. doi:10.3763/asre.2007.5007
- Harris, P. B., & Brown, B. B. (1996). The home and identity display: interpreting resident territoriality from home exteriors. *Journal of Environmental Psychology*, 16(3), 187-203.
- Hayden, D. (2002). *Redesigning the American dream: the future of housing, work and family life*. W.W. Norton publishers.
- Heft, H. (1997). The relevance of Gibson's ecological approach to perception for environment- behavior studies. In G. T. Moore & R. W. Marans (Eds.), *Advances in environment, behavior, and design: Toward the integration of theory, methods, research and utilization* (Vol. 4th). New York: Plenum.

- Heft, H. (2007). The social constitution of perceiver-environment reciprocity. *Ecological Psychology, 19*, 85-105. doi:10.1080/10407410701331934.
- Hernandez, B., Hidalgo, M. C., SalazarLaplace, M. E., & Hess, S. (2007). Place attachment and place identity in natives and nonnatives. *Journal of Environmental Psychology, 27*, 310–319.
- Hirschon, R. B. and Gold, J. R. (1982). Territoriality and the home environment in a Greek urban community. *Anthropological Quarterly, 63-73*.
- Hidalgo, M. C., & Hernández, B. (2001). Place attachment: Conceptual and empirical questions. *Journal of Environmental Psychology, 21*, 273-281.
- Hirschon, R. B., & Gold, J. R. (1982). Territoriality and the home environment in a Greek urban community. *Anthropological Quarterly, 55(2)*, 63-73.
- Hochberg, J. E. (1964). *Perception*. Englewood Cliffs, N.J.: Prentice-Hall.
- Hutchison, D.E. (2015). *Dimensions of human behavior: Person and environment*. USA: Sage.
- Horayangkura, V. (2012). Incorporating environment-behavior knowledge into the design process: An elusive challenge for architects in the 21st Century. *Procedia-Social and Behavioral Sciences, 50*, 30-41.
- Iranmanesh, A. (2012). *Territorial aspects of place definition: Exploring the gap within and in-between territories*. Doctoral dissertation, Eastern Mediterranean University (EMU)-Doğu Akdeniz Üniversitesi (DAÜ), Gazimağusa, Kuzey Kıbrıs Türk Cumhuriyeti.
- Ittelson, W. (1973). Environment perception and contemporary perceptual theory. In W. H. Ittelson (Ed.), *Environment and cognition* (pp. 141-154). New York: Seminar.

- Ishii, K., Miyamoto, Y., Rule, N. O., & Toriyama, R. (2014). Physical objects as vehicles of cultural transmission: Maintaining harmony and uniqueness through colored geometric patterns. *Personality and Social Psychology Bulletin, 40*, 175-188. doi:10.1177/0146167213508151
- Jurgens, U., & Gnad, M. (2002). Gated communities in South Africa – Experiences from Johannesburg. *Environment and Planning B, 29*: 337-353.
- Je, H.S. (1986). *Urban residential streets: A study of street types and their territorial performances*. (Unpublished PhD dissertation). Department of Architecture, University of Pennsylvania. Retrieved from: <http://repository.upenn.edu/dissertations/AAI8623999>
- Karrholm, M. (2007). The materiality of territorial production: A conceptual discussion of territoriality, materiality, and the everyday life of public space. *Space and Culture, 10*(4), 437–453. <http://doi.org/10.1177/1206331207304356>
- Kilpatrick, F. P. (Ed.). (1961). *Explorations in transactional psychology*. New York University Press. <https://doi.org/10.1037/11303-000>.
- Korpela, K. M., Hartig, T., Kaiser, F. G., & Fuhrer, U. (2001). Restorative experience and self-regulation in favorite places. *Environment & Behavior, 33*, 572-589. doi:10.1177/00139160121973133
- Korpela, K. M. (1989). Place-identity as a product of environmental self-regulation. *Journal of Environmental Psychology, 9*, 241- 256. doi:10.1016/s0272-4944(89)80038-6
- Kusenbach, M. (2008). A hierarchy of urban communities: Observations on the nested character of place. *City & Community, 7*: 225–249. doi:10.1111/j.1540-

6040.2008. 00259.x

- Lachman, R., Lachman, J. L., & Butterfield, E. (1979). *Cognitive psychology and information processing : An introduction*. Hillsdale, N.J.: Lawrence Erlbaum Associates.
- Lang, J. (1987). *Creating architectural theory*. New York: Van Nostrand Reinhold.
- Lang, J. T. (1994). *Urban design: The American experience*. New York: Van Nostrand Reinhold.
- Lewin, K. (1946). Action research and minority problems. *Journal of Social Issues*, 2, 34-46. doi:10.1111/j.1540-4560.1946.tb02295.x
- Lawrence, R. J. (1987). *Housing, dwellings and homes: Design theory, research and practice*. New York: Wiley.
- Lay, M. C. (1998). Site layout, territorial organization and social behavior in residential environments. *International Association for People-Environment Studies*, 15: 187-201.
- Lee, B. A. & Campbell, K. E. (1997). Common ground? Urban neighborhoods as survey respondents see them. *Social Science Quarterly*, 922-936.
- Lee, T. (1970). Urban neighborhood as a socio-spatial schema. In H. M. Proshansky, W. H. Ittelson, & L. G. Rivlin (Eds.), *Environmental psychology: Man and his physical setting* (pp.349-370). New York: Holt, Rinehart & Winston. (Reprinted from *Human Relations*, 1968, 21, 241-298)
- Lee, T.R. (1973). Psychology and Living Space. In R. M. Downs, & D. Stea (Eds.), *Image and environment: Cognitive mapping and spatial behavior* (pp. 87–108). Chicago: Aldine. (Reprinted from *Transactions of the Bartlett Society*, Vol. 2, 1963-1964)

- Lee, T. (1968). Urban neighborhood as a socio-spatial scheme. *Human relations*, 21(3), 241-267.
- Lewicka, M. (2011). Place attachment: How far have we come in the last 40 years? *Journal of Environmental Psychology*, 31, 207-230.
- Ledgerwood, A., & Liviatan, I. (2010). The price of a shared vision: Group identity goals and the social creation of value. *Social Cognition*, 28, 401-421.
doi:10.1521/soco.2010.28.3.401
- Ledgerwood, A., Liviatan, I., & Carnevale, P. J. (2007). Group identity completion and the symbolic value of property. *Psychological Science*, 18, 873-878.
doi:10.1111/j.1467-9280.2007.01994.x
- Lincoln, Y. S., & Guba, E. (1985). *Naturalistic inquiry*. Beverly Hills, CA: SAGE Publications.
- Lohmann, A., Arriaga, X. B., & Goodfriend, W. (2003). Close relationships and placemaking: Do objects in a couple's home reflect couplehood? *Personal Relationships*, 10, 437-449. doi:10.1111/1475-6811.00058
- Locke, L. F., Spirduso, W. W., & Silverman, S. J. (2007). *Proposals that work: A guide for planning dissertations and grant proposals (5th ed.)*. Thousand Oaks, CA: Sage.
- Lofland, L. H. (1973). *A world of strangers: Order and action in urban public space*. New York: Basic Books.
- Low, S. (2004). *Behind the gates: Life, security and the pursuit of happiness in Fortress America*. London: Routledge.
- Lynch, K. (1960). *The image of the city*. MIT press.
- Madanipour, A. (2003). *Public and private spaces of the city*. London: Routledge.

- Masuda, T., Gonzalez, R., Kwan, L., & Nisbett, R. E. (2008). Culture and aesthetic preference: Comparing the attention to context of East Asians and Americans. *Personality and Social Psychology Bulletin*, *34*, 1260-1275. doi:10.1177/0146167208320555
- Maner, J. K., DeWall, C. N., Baumeister, R. F., & Schaller, M. (2007). Does social exclusion motivate interpersonal reconnection? Resolving the "porcupine problem." *Journal of Personality and Social Psychology*, *92*, 42-55. doi:10.1037/0022-3514.92.1.42
- Marsh, K. L., Johnston, L., Richardson, M. J., & Schmidt, R. C. (2009). Toward a radically embodied, embedded social psychology. *European Journal of Social Psychology*, *39*, 1217- 1225. doi:10.1002/ejsp.666
- Marchinton, R. L., & Kile, T. L. (1977). White-tailed deer rubs and scrapes: Spatial, temporal and physical characteristics and social role. *American Midland Naturalist*, *97*, 257-266
- McElroy, J. C., Morrow, P. C., & Ackerman, R. J. (1983). Personality and interior office design: Exploring the accuracy of visitor attributions. *Journal of Applied Psychology*, *68*, 541-544. doi:10.1037/0021-9010.68.3.541
- Miyamoto, Y., Nisbett, R. E., & Masuda, T. (2006). Culture and the physical environment: Holistic versus analytic perceptual affordances. *Psychological Science*, *17*, 113-119. doi:10.1111/j.1467-9280.2006.01673.x
- Monaghan, N., & Ayoko, B. O. (2019). Open-plan office, employees' enactment, interpretations and reactions to territoriality. *International Journal of Manpower*, *40*(2), 228-245.
- Marsh, K. L., Johnston, L., Richardson, M. J., & Schmidt, R. C. (2009). Toward a

- radically embodied, embedded social psychology. *European Journal of Social Psychology*, 39, 1217-1225. doi:10.1002/ejsp.666
- Meagher, B. R. (2016). There's no place like a neurotic's home: Neuroticism moderates the prioritization of restorative properties in home environments. *Journal of Individual Differences*, 37, 260-267. doi:10.1027/1614-0001/a000213
- Meagher, B. R. (2019). Ecologizing social psychology: The physical environment as a necessary constituent of social processes. *Personality and Social Psychology Review*, 24(1), 3-23. doi:10.1177/1088868319845938
- Meagher, B. R., & Marsh, K. L. (2017). Seeking the safety of sociofugal space: Environmental design preferences following social ostracism. *Journal of Experimental Social Psychology*, 68, 192-199. doi:10.1016/j.jesp.2016.07.004
- Meagher, B. R. (2018). Deciphering the religious orientation of a sacred space: Disparate impressions of worship settings by congregants and external observers. *Journal of Environmental Psychology*, 55, 70-80. doi:10.1016/j.jenvp.2017.12.007
- Manzo, L. C. (2003). Beyond house and haven: toward a revisioning of emotional relationships with places. *Journal of Environmental Psychology*, 23(1), 47-61.
- Marshall, C., & Rossman, G. B. (2006). *Designing qualitative research* (4th ed.). Thousand Oaks, CA: Sage Publications.
- Mayo, E. (1933). *The human problem of an industrial civilization*. New York, Macmillan Co.
- Maxwell, K. (2004). *Gated communities: Selling the good life*. Masters Thesis, School of Planning, Dalhousie University.

- McCann, E. J. (1995). Neotraditional developments: The anatomy of a new urban form. *Urban Geography*, 16(3), 210-233.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Nadeem, O., Hameed, R., Zaidi, S. S., Haydar, S., Haider, H., & Tabassum, H. (2013). Residents' perception and analysis of the contemporary neighborhood design practices in Lahore, Pakistan. *Pakistan Journal of Engineering and Applied Sciences*, 12, 143–158.
- Nagar, D. (2006). *Environmental psychology*. New Delhi, India: Concept Publishing Company.
- Neisser, U. (1976). *Cognition and reality: principles and implications of cognitive psychology*. San Francisco: W. H. Freeman.
- Newman, O. (1972). *Defensible space*. New York: Macmillan.
- Nguyen, T. T., Ryan, R. M., & Deci, E. L. (2017). Solitude as an approach to affective self-regulation. *Personality and Social Psychology Bulletin*, 44, 92-106. doi:10.1177/0146167217733073
- Niedenthal, P. M., Barsalou, L. W., Winkielman, P., KrauthGruber, S., & Ric, F. (2005). Embodiment in attitudes, social perception, and emotion. *Personality and Social Psychology Review*, 9, 184-211. doi:10.1207/s15327957pspr0903_1
- Nosheen, Mujeeb & Muzaffar (2021). Territorial permeability and perception of security among residents of gated and non-gated communities. *The journal of political science*, 39(1), 40-59.
- Norman, D. A. (1993). Cognition in the head and in the world . *Cognitive Science*,

17(1), 1-6.

- Oya, N. (2019). *Human territorial functioning at the scale of residential environments*. [Doctoral dissertation, Middle east technical university]. Open METU virtual repository. <https://libraryguides.vu.edu.au/apa-referencing/7Theses>
- Oaksford, M. R. (1986). Gibson and situation semantics. *Bulletin of the British Psychological Society*, 39.
- Oswald, F., & Wahl, H. W. (2005). Dimensions of the meaning of home in later life. In G. D. Rowles & H. Chaudhury (Eds.), *Home and identity in late life international perspectives* (pp. 21-46). New York: Springer.
- Parr, A. E. (1965). In search of a theory. In H. M. Proshansky, W. H. Ittelson, & L. G. Rivlin (Eds.), *Environmental psychology: Man and his physical setting* (pp.37-42). New York: Holt, Rinehart & Winston.
- Peleman, K. (2003). Power and territoriality: A study of Moroccan women in antwerp. *Tijdschrift voor Economische en Sociale Geografie*, 94(2): 151-163.
- Porteous, J. D. (1976). Home: The territorial core. *Geographical Review*, 66(4), 383-390. doi: <http://doi.org/10.2307/213649>.
- Porteous, J. D. (1977). *Environment and behavior: Planning and everyday urban life*. Addison-Wesley Pub. Co.
- Pouw, W. T. J. L., & Looren de Jong, H. (2015). Rethinking situated and embodied social psychology. *Theory & Psychology*, 25, 411-433. doi:10.1177/0959354315585661
- Pendola, R. & Gen, S. (2008). Does “Main Street” promote sense of community? A comparison of San Francisco neighborhoods. *Environment and Behavior*, 40, 545-574.

- Pinet, C. (1988). *A "sense of belonging" in the neighborhood: The effect of traffic on space appropriation*. Nineteenth Annual Conference of the Environmental Design Research Association, Pomona, California.
- Proctor, R. W., & Vu, K. P. L. (2006). The cognitive revolution at age 50: Has the promise of the human information-processing approach been fulfilled? *International Journal of Human- Computer Interaction, 21*(3), 253-284.
- Proshansky, H. M., Ittelson, W. H., and Rivlin L. G. (1970). Freedom of Choice and Behavior in a Physical Setting. In Proshansky, H. M., Ittelson, W. H., and Rivlin, L. G. (Eds.), *Environmental psychology: Man and his physical setting*. 173-183. New York: Holt, Rinehart & Winston.
- Proshansky, H. M., Ittelson, W. H., & Rivlin, L. G. (1972). Freedom of choice and behavior in a physical setting. In J. F. Wohlwill & D. H. Carson (Eds.), *Environment and the social sciences: Perspectives and applications* (pp. 29-43). Washington, DC: American Psychological Association. doi:10.1037/10045-003.
- Proshansky, H. (1978). City and self-identity. *Environment and Behavior, 10*(2), 147-169.
- Proshansky, H. M., Fabian, A. K., & Kaminoff, R. (1983). Placeidentity: Physical world socialization of the self. *Journal of Environmental Psychology, 3*, 57-83. doi:10.1016/s0272- 4944(83)80021-8
- Rahman, A., & Anis, B. (2009). Dynamics of gated communities, their impact and challenges for sustainable development: A case study of Lahore, Pakistan. *International Journal of Architectural Research, 3*, 57–70.
- Rapoport, A. (1977). *Human aspects of urban form: Towards a man-environment*

- approach to urban form and design* (1st ed.). Oxford ; New York: Pergamon Press.
- Rapoport, A. (1982). *The meaning of the built environment : a nonverbal communication approach*. Beverly Hills: Sage Publications.
- Rapoport, A. (1983). Development, culture change and supportive design. *Habitat International*, 7(5/6), 249-268.
- Rapoport, A. (1990). Systems of Activities and Systems of Settings. In S. Kent (Ed.), *Domestic architecture and the use of space: An interdisciplinary cross-cultural study*. New York: Cambridge University Press.
- Rapoport, A. (1992). On Cultrual Landscapes. *TDSR*, 3(2), 33-47.
- Rapoport, A. (1994). Spatial organization and the built environment. In T. Ingold (Ed.), *Companion encyclopedia of anthropology* (pp. 460-502). London: Routledge.
- Rapoport, A. (1995). A critical view of the concept home. In D. Benjamin, E. Arén & D. Stea (Eds.), *The home: words, interpretations, meanings and environments*. Aldershot: Avebury.
- Rapoport, A. (2005). *Culture, architecture and design*. Chicago: Locke Science Pub. Co.
- Relph, E. (1976). *Place and placelessness*. London: Pion.
- Ren, D., Wesselmann, E., & Williams, K. D. (2016). Evidence for another response to ostracism: Solitude seeking. *Social Psychological & Personality Science*, 7, 204-212.
- Rhodes. R.A.W. (2000). Governance and public administration. In J. Pierre (Ed.), *Debating governance: Authority, steering and democracy*. Oxford: Oxford

University Press.

- Russell, J. A., & Ward, L. M. (1982). Environmental psychology. *Annual Review of Psychology*, *33*, 651–688.
- Saegert, S. (1985). The role of housing in the experience of dwelling. In I. Altman & C. M. Werner (Eds.), *Home environments: Human behavior and environment* (pp. 287-309). New York: Plenum Press.
- Saegert, S., & Winkel, G. H. (1990). Environmental psychology. *Annual Review of Psychology*, *41*, 441–477. <https://doi.org/10.1146/annurev.ps.41.020190.002301>
- Sack, R. D. (1986). *Human territoriality: Its theory and history*. Cambridge, UK: Cambridge University Press.
- Sakip, S. R. M., Akhir, N. M., & Omar, S. S. (2015). Determinant factors of successful public parks in Malaysia. *Procedia - Social and Behavioral Sciences*, *170*, 422-432. doi:10.1016/j.sbspro.2015.01.003
- Sandilands, M. L., & McMullin, J. A. (1980). Territorial marking and dominance: A field study in the halls of academia. *Psychological Reports*, *46*(3, Pt. 1), 1018.
- Saxbe, D. E., & Repetti, R. (2010). No place like home: Home tours correlate with daily patterns of mood and cortisol. *Personality and Social Psychology Bulletin*, *36*, 71-81. doi:10.1177/0146167209352864
- Sebba, R., & Churchman, A. (1983). Territories and territoriality in the home. *Environment and Behavior*, *15*, 191-210.
- Seanders, O., & Maroofi, H. (2021, April). COVID 19 in gated community at Jakarta, Indonesia. In *IOP Conference Series: Earth and Environmental Science*, *737*(1), 012-056.
- Schwandt, T. A. (Ed.). (2007). *The Sage dictionary of qualitative inquiry* (3rd ed.).

Thousand Oaks, CA: Sage.

Schubert, T. W., & Semin, G. R. (2009). Embodiment as a unifying perspective for psychology. *European Journal of Social Psychology*, 39, 1135-1141. doi:10.1002/ejsp.670

Schliemann, A. D. (1998). Logic of meanings and situated cognition. *Learning and Instruction*, 8(6), 549-560.

Shaw, R., Turvey, M., & Mace, W. (1982). Ecological psychology: The consequences of a commitment to realism. In W. B. Weimer & D. S. Palermo (Eds.), *Cognition and the symbolic processes* (2nd ed., pp. 450). Erlbaum, N.J.: Hillsdale.

Sell, J. (1983). *Territoriality and children's experience of the neighborhood*. (Unpublished PhD dissertation). Department of Geography, University of Arizona, Tucson, Arizona. Retrieved from <http://arizona.openrepository.com/arizona/handle/10150/187203>.

Sennett, R. (1992). *The fall of the public man*. New York: W.W. Norton.

Skaburskis, J. V. (1974). Territoriality and its relevance to neighborhood design: a review. *Journal of Architectural Research*, 3(1), 39-44.

Sommer, R (1969). *Personal space; the behavioral basis of design*. Englewood cliffs, NJ: Prentice-Hall.

Sng, O., Neuberg, S. L., Varnum, M. E. W., & Kenrick, D. T. (2018). The behavioral ecology of cultural psychological variation. *Psychological Review*, 125, 714-743. doi:10.1037/rev0000104

Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (2nd ed.). Thousand Oaks, CA:

Sage.

- Sun, R., Marsh, L., & Onof, C. (2008). Introduction to the special issue "Perspectives on social cognition". *Cognitive Systems Research*, 9(1-2), 1-4.
- Stokols, D. (1978). Environmental psychology. *Annual Review of Psychology*, 29, 253–295.
- Stokols, D., & Altman, I. (1987). *Handbook of environmental psychology*. New York: Wiley.
- Skaburskis, J. V. (1974). Territoriality and its relevance to neighborhood design: A review. *Journal of Architectural Research*, 3(1), 39-44.
- Smith, E. R., & Semin, G. R. (2004). Socially situated cognition: Cognition in its social context. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 36, pp. 53-117). San Diego, CA: Elsevier Academic Press. doi:10.1016/s0065-2601(04)36002-8
- Szlemko, W. J., Benfield, J. A., Bell, P. A., Deffenbacher, J. L., & Troup, L. (2008). Territorial markings as a predictor of driver aggression and road rage. *Journal of Applied Social Psychology*, 38, 1664-1688. doi:10.1111/j.1559-1816.2008.00364.x
- Sixsmith, A., & Sixsmith, J. (1991). Transitions in home experience in later life. *Journal of Architectural and Planning Research*, 8(3), 181-191.
- Sixsmith, J. (1986). The meaning of home: an exploratory study of environmental experience. *Journal of Environmental Psychology*, 6(4), 281-298.
- Stea, D. (1965). The Anthropology of Space: An Organizing Model. In Proshansky, H. M., Ittelson, W. H., and Rivlin, L. G. (Eds.) (1970), *Environmental psychology: Man and his physical setting*. 37-42. New York: Holt, Rinehart &

Winston.

- Stea, D. (1970). The anthropology of space: An organizing model. In H. M. Proshansky, W. H. Ittelson, & L. G. Rivlin (Eds.), *Environmental psychology: Man and his physical setting* (pp.37-42). New York: Holt, Rinehart & Winston.
- Stea, D., & Blaut, J. M. (1973). Toward a developmental theory of spatial learning. In R. M. Downs & D. Stea (Eds.), *Image and environment: Cognitive mapping and spatial behavior*, (pp. 51–62). Chicago: Aldine.
- Tariq, F., Salman, M., Hasan, J., Zafar, Z., Malik, S., Gul, A.,...Sheikh, N. B. (2018). Developing countries perspective on housing affordability: Recommendations for Pakistan. *Technical Journal, University of Engineering and Technology (UET) Taxila, Pakistan*, 23, 1–10.
- Taylor, R. B. (1978). Human territoriality: A review and a Model for Future-Research. *Cornell Journal of Social Relations*, 13(2), 125-151.
- Taylor, R. B., Gottfredson, S. D., & Brower, S. (1981). Territorial cognitions and social climate in urban neighborhoods. *Basic and Applied Social Psychology*, 2(4), 289-303.
- Taylor, R. B. and Brower, S. (1985). Home and near-home territories. In I. Altman & C. M. Werner (Eds.), *Home environments* (pp. 183-212). USA: Springer.
- Taylor, B. J. (1988). *Human territorial functioning: An empirical, evolutionary perspective on individual and small group territorial cognitions, behaviors and consequences*. New York: Cambridge University Press.
- Till, K. (2001). New urbanism and nature: Green marketing and the neotraditional community. *Urban Geography*, 22(3): 220-248.

- Tolman, E. C. (1948). Cognitive maps in rats and men. *Psychological Review*, 55(4), 189–208. <https://doi.org/10.1037/h0061626>
- Trost, J. E. (1986). Statistically nonrepresentative stratified sampling: A sampling technique for qualitative studies. *Qualitative Sociology*, 9(1), 54.
- Turvey, M. T. (1992). Affordances and prospective control: An outline of the ontology. *Ecological Psychology*, 4(3), 173.
- Turvey, M. T., & Carello, C. (1985). The equation of information and meaning from the perspectives of situation semantics and Gibson's ecological realism. *Linguistics and Philosophy*, 8, 81-90.
- Turvey, M. T., & Carello, C. (1986). The ecological approach to perceiving acting - A pictorial essay. *Acta Psychologica*, 63(1-3), 133-155.
- Ullán, A. M., Belver, M. H., Fernández, E., Serrano, I., Delgado, J., & Herrero, C. (2012). Hospital designs for patients of different ages: Preferences of hospitalized adolescents, nonhospitalized adolescents, parents, and clinical staff. *Environment & Behavior*, 44, 668-694. doi:10.1177/0013916511403802
- Wapner, S., & Demick, J. (2000). Person-in-environment psychology: A holistic, developmental, systems-oriented perspective. In W. B. Walsh, K. H. Craik, & R. H. Price (Eds.), *Person–environment psychology: New directions and perspectives* (pp. 25–60). Lawrence Erlbaum Associates Publishers.
- Webber, M. (1964). The urban place and the nonplace urban realm. In Webber et. al. (Eds.), *Explorations into urban structure* (pp. 79-153). Philadelphia: University of Pennsylvania Press.
- Webster, C., Glasze, G. & Frantz, K. (2002). The global spread of gated communities. *Environment and Planning B*, 29: 315-320.

- Wells, M. M., & Thelen, L. (2002). What does your workspace say about you? The influence of personality, status, and workspace on personalization. *Environment & Behavior, 34*, 300-321. doi:10.1177/0013916502034003002
- Werner, C. M., Brown, B. B., Altman, I., & Staples, B. (1992). Close relationships in their physical and social contexts: A transactional perspective. *Journal of Social and Personal Relationships, 9*, 411-431. doi:10.1177/0265407592093005
- Wicker, A. (1987). Behavior settings reconsidered: Temporal stages, resources, internal dynamics, context. In I. Altman & D. Stokols (Eds.), *Handbook of environmental psychology* (Vol. 1). New York: Wiley.
- Wicker, A. (1992). Making sense of environments. In W. B. Walsh, K. H. Craik & P. K. H. (Eds.), *Person-environment psychology: Models and perspectives*. Hillsdale, NJ: Erlbaum.
- Williams, K. D. (2007). Ostracism. *Annual Review of Psychology, 58*, 425-452. doi:10.1146/annurev.psych.58.110405.085641
- Withagen, R., & Van Wermeskerken, M. (2010). The role of affordances in the evolutionary process reconsidered: A niche construction perspective. *Theory & Psychology, 20*, 489-510. doi:10.1177/0959354310361405
- Withagen, R., de Poel, H. J., Araújo, D., & Pepping, G.-J. (2012). Affordances can invite behavior: Reconsidering the relationship between affordances and agency. *New Ideas in Psychology, 30*, 250-258. doi:10.1016/j.newideapsych.2011.12.003
- Wolcott, H. F. (1990). *Writing up qualitative research*. Newbury Park, Calif.: Sage Publications.

- Wu, F.L. (2004). Transplanting cityscapes: The use of imagined globalization in housing commodification in Beijing. *AREA*, 36 (3): 227-234.
- Xu, F. (2015). A situated understanding of residents' caretaking attitudes toward shared spaces in three high-rise gated developments in Shanghai. *Ecopsychology*, 7(2), 59–74.
- Yin, R. K. (1994). *Case study research: Design and methods* (2nd ed.). Thousand Oaks, CA: Sage.
- Yin, R. K. (2003). *Application of case study research* (3rd ed.). Thousand Oaks, CA: Sage.
- Zeisel, J. (2006). *Inquiry by design: Environment/behavior/neuroscience in architecture, interiors, landscape, and planning*. Norton & Company, Inc.: New York.

APPENDICES

Appendices –A**Semi structured Interview guide for the Residents of Gated Communities.*****Interview Guidelines:***

- These are the guidelines for in-depth semi structured interview, which is an approach of qualitative research. It provides the opportunity to establish rapport with the participants and help gathering information from participants own experiences and perspectives.
- Set of questions are developed to initiate conversation promptly and efficiently, but participants are encouraged to give detailed and in-depth responses about the topic under discussion.
- During the interview process it is important to maintain the delicate balance between personal, social, and professional question answer sequences.

Interview Questions for residential history:

1. Where were you born? How long have you been in Lahore?
2. Please give brief history of your homes that you lived in. How many homes have you lived since your childhood? How would you describe your previous homes and its vicinity? Any significant aspects or features that you want to mention about your previous residences? Please compare your previous homes with the current one.
3. How many neighborhood areas have you lived in since your childhood? How were the previous neighborhood areas? What were your experiences during your stay in previous neighborhoods (detailed answer required)? Please compare your previous neighborhoods with the current one and tell me what your opinions are?
4. When did you move to this development? Why did you choose to stay here?
5. How long have you been living in your current house (years and months)? Why did you choose this Gated community? what other options did you look before deciding to move here?
6. when you first moved to this gated community what was it like, what is changed since then and what's your opinion about that change? Please share your

experiences of living in this gated community? have your perception about this gated community changed since you moved here, if yes why, if not why not? What are the features and aspects that you like most and dislike most in this gated community?

Questions for territorial functions within Gated communities:

1. please take me through your everyday routine within your gated community?
2. which facilities (spatial and social) this gated community offers to its residents? What is the quality of facilities offered by this gated community? And how often do you use the facilities available within this community?
3. what facilities within this community do you use often? Is there any facility that you never used?
4. How familiar you are with your gated community (Spatial familiarity with other blocks and roads)?
5. if you go out of the community which route, do you usually take? Are there multiple routes available?
6. why did you choose to live in a gated community? what were the reasons to move to a new house in general and why to choose house in walled neighborhood?
7. What is your general opinion about gated communities? What potential advantages and disadvantages it provides to people?
8. What is your opinion about walls, gates, and surveillance of your gated community? do you believe it has made the vicinity of your home more secure?
9. How do you think people living in open communities perceive these gated developments?
10. do you think that nonresidents should be allowed to visit this gated community without any documentation? If yes, why. If not, why not? What can be the acceptable reasons that can allow nonresidents to visit?
11. do you think the facilities available within your gated community came as a package deal? Do you see these places as exclusive facilities for residents? Do you feel ownership over these facilities (spatial and social)?

12. in general, who do you think owns this gated community? who manages the gated community? do residents have any role in decision making for the community?
13. Besides your home, is there any place within this community that gives you home like feeling?
14. Do you see this gated community as your home? Do you think the perception of home range differs in gated communities? How do you feel when you enter the gate of your community? please compare with previous residences. Especially, if you have lived in open communities.
15. who do you think should use the facilities available in gated community? do you think nonresidents should be allowed to use these facilities?
16. how safe do you feel in your gated community? any difference in sense of safety in daytime or nighttime? Do you think this community is safe for women and children? Would you allow your children to play outside or in parks without supervision?
17. how familiar are you with the other residents of your community? if you see any nonresident would you be able to identify them?
18. Will you intervene if some suspicious individual or suspicious activity is happening in your community? if you won't, who do you think should?
19. Any particular social and spatial reforms do you think this community needs? Do you see any room for improvement in this gated community? if you were in charge of this gated community what would you change and why?

Questions for socio cultural aspects of territoriality:

1. How well do you know about the adjacent gated communities?
2. Do you know people living in these communities?
3. Please compare your gated community with the adjacent gated communities? How would you evaluate your gated community in comparison with peripheral gated communities (security, facilities, spatial resources, management etc.)?
4. Have you heard any criminal incidences in adjacent communities? Or any incidence in your gated community?

5. Do you know who live next door? How many neighbors do you know in your street? How would you define your relationship with your neighbors? If any new resident moves here, do you usually initiate welcoming gesture? Do you like making acquaintances with your neighbors or fellow community members?
6. Do you feel attached to your gated development? What are your feelings and emotions towards your gated development?
7. What is your opinion about the management of the community?
8. How much do you trust the management?
9. Is there any resident's committee? Are you part of that committee?

Questions for territorial improvement within gated communities

1. What improvements do you think your gated community needs in order to offer quality living to its residents? Do you believe by moving in gated community your quality of life has improved? If yes, how?
2. What measures should be taken to enhance the sense of safety and sense of belongingness within the residents of this gated community?
3. What is your ideal residence? If you get better residential area, would you be willing to move? What could make you move your home into a new residential area?
4. Do you consider gated communities as ideal home environments? Do you think everyone should move to gated home developments?

Appendix-B**Bio Data Form**

Name:

- Age: 20s
 - 30s
 - 40s
 - 50s
 - 60 and above

Gender:

Employment status:

Family Type:

Name of Residential community:

Residence length (in years):

Date of Interview:

Interview Length:

Appendix-C**Consent Form**

- I..... voluntarily agree to participate in this research study.
- I understand that even if I agree to participate now, I can withdraw at any time or refuse to answer any question without any consequences of any kind.
- I have had the purpose and nature of the study explained to me in writing and I have had the opportunity to ask questions about the study.
- I understand that participation involves sharing my residential history and information about current residence.
- I understand that I will not benefit directly from participating in this research.
- I agree to my interview being audio-recorded.
- I understand that all information I provide for this study will be treated confidentially.
- I understand that in any report on the results of this research my identity and the residential information I shared will remain anonymous. This will be done by changing my name and disguising any details of my interview which may reveal my identity or the identity of people I speak about.
- I understand that disguised extracts from my interview may be quoted in dissertation and research papers written by the researcher.
- I understand that if I inform the researcher that myself or someone else is at risk of harm they may have to report this to the relevant authorities - they will discuss this with me first but may be required to report with or without my permission.
- I understand that signed consent forms and original audio recordings will be

retained by the researcher until the successful completion of her dissertation.

- I understand that a transcript of my interview in which all identifying information has been removed will be retained only for academic purpose up until the successful completion of degree.
- I understand that I am free to contact any of the people involved in the research to seek further clarification and information.

Nida Nosheen

PhD. Scholar

National Institute of Psychology,
Quaid-e-Azam University, Islamabad

Signature of research participant

Signature of participant

Date

Signature of researcher

I believe the participant is giving informed consent to participate in this study

Signature of researcher

Date

Appendix-D**Permission Letter for Field Work****Permission letter for Field work**

To Nida Nosheen,
Ph.D. Scholar,
National Institute of Psychology,
Quaid-e-Azam University,
Islamabad, Pakistan.

Subject: Permission letter for Field work

On behalf of Eden Canal Villas, I am writing this letter to you for getting permission to conduct your research field within the premises of the society.

We, the management team, decide to let you support in collecting required data as per the need of your research work. You are requested to follow all the ethical guidelines as per stated by the society and your work while keeping the information confidential and usable for research purposes only.

Hope this permission will merit you most favorable response and results.

Sincerely,

Management and Security,
Eden Builders (Pvt) Ltd,
Lahore, Pakistan.
Address: canal road, 1 km Thokar chowk . Lahore, 54800. Pakistan.
Telephone: 03001234567.

Permission letter for Field work

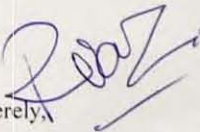
To Nida Nosheen,
Ph.D. Scholar,
National Institute of Psychology,
Quaid-e-Azam University,
Islamabad, Pakistan.

Subject: Permission letter for Field work

On behalf of EME Housing Society, I am writing this letter to you for getting permission to conduct your research field within the premises of the society.

We, the management team, decide to let you support in collecting required data as per the need of your research work. You are requested to follow all the ethical guidelines as per stated by the society and your work while keeping the information confidential and usable for research purposes only.

Hope this permission will merit you most favorable response and results.

Sincerely,



Management and Security,
DHA EME sector,
Lahore, Pakistan.
Coordinate: 31.4512546, 74.2105038
Phone: +92 42 37510852
Website: www.dhaemesector.org

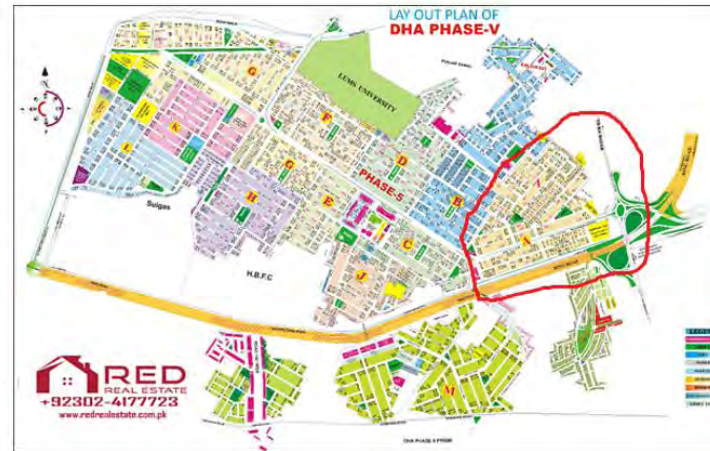
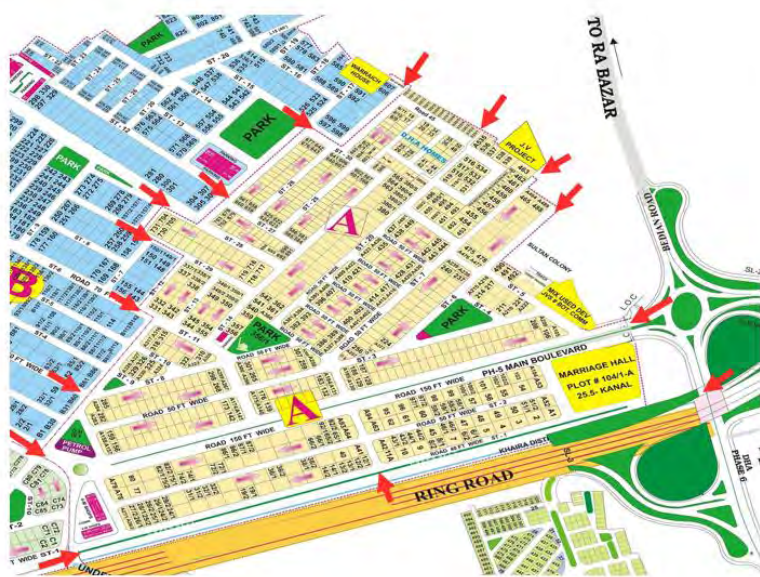
Dated: 19.04.2017

TO WHOM IT MAY CONCERN

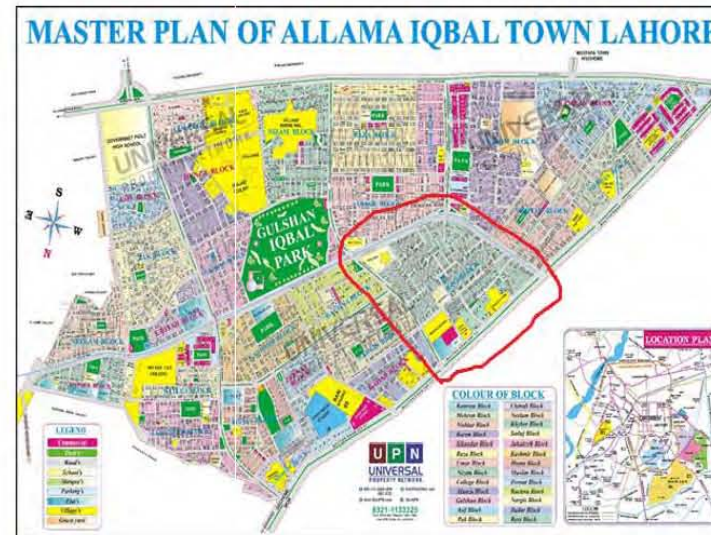
It is certified that **Ms. Nida Nosheen** is Ph.D student of National Institute of Psychology, Quaid-i-Azam University Islamabad. She has undertaken a research project on "**An Exploratory study of Human Territorial Cognitions, Behaviors and Consequences in Urban Spatio-physical Context; A Qualitative Inquiry**". For this purpose kindly allow her to visit your residential community to collect information/data. The information/data collected from the residents of your residential community will be used only for research purpose. It is ensured that data will be kept confidential and will only be used for research purpose.

Your cooperation in this regard will be highly appreciated.

(Prof. Dr.  Kamal)
 Director

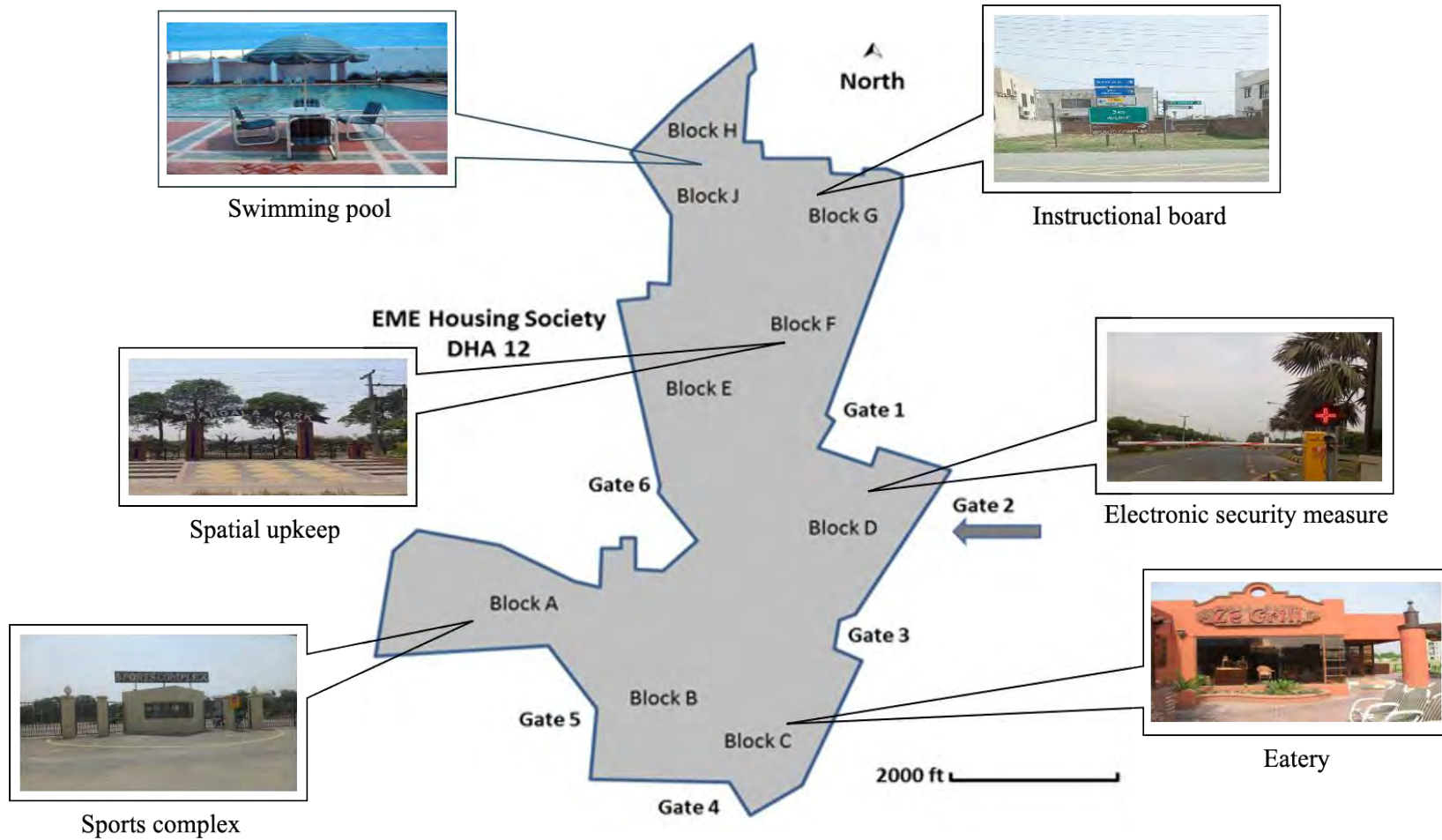


The figure is showing the layout map of DHA Phase V with indicated block A that was selected for permeability analysis. Source: Lahore real estate .com (2021).

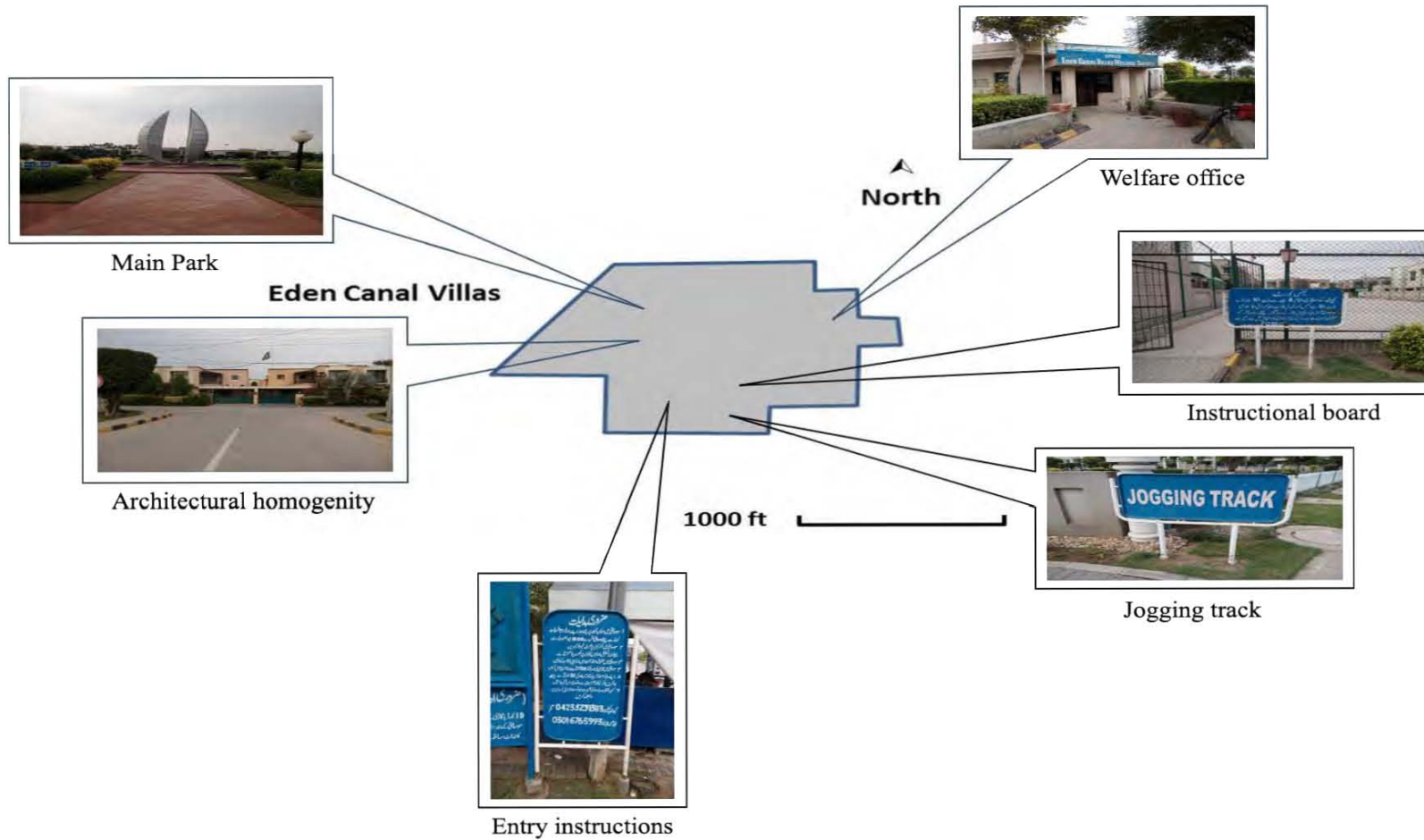


The figure is showing the layout map of Allama Iqbal Town with indicated Ravi block that was selected for permeability analysis. Source: Lahore real estate .com (2021).

Appendix-F



The picture is showing physical layout of EME housing society along with different available spatial resources within society. (Source, Author)



The picture is showing physical layout of EME housing society along with different available spatial resources within society. (Source, Author)