

UNIVERSITÉ DU QUÉBEC À MONTRÉAL

MONTREAL'S SUPERPOSED FLATS: THE INFLUENCE OF ARCHITECTURE
ON ATTACHMENT AND SENSE OF PLACE AMONG ENGLISH-SPEAKING
RESIDENTS OF VERDUN BOROUGH

THESIS
PRESENTED
IN PARTIAL FULFILLMENTS FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY IN URBAN STUDIES

BY
POUPAK PARVARESH

DECEMBER 2016

UNIVERSITÉ DU QUÉBEC À MONTRÉAL
Service des bibliothèques

Avertissement

La diffusion de cette thèse se fait dans le respect des droits de son auteur, qui a signé le formulaire *Autorisation de reproduire et de diffuser un travail de recherche de cycles supérieurs* (SDU-522 – Rév.07-2011). Cette autorisation stipule que «conformément à l'article 11 du Règlement no 8 des études de cycles supérieurs, [l'auteur] concède à l'Université du Québec à Montréal une licence non exclusive d'utilisation et de publication de la totalité ou d'une partie importante de [son] travail de recherche pour des fins pédagogiques et non commerciales. Plus précisément, [l'auteur] autorise l'Université du Québec à Montréal à reproduire, diffuser, prêter, distribuer ou vendre des copies de [son] travail de recherche à des fins non commerciales sur quelque support que ce soit, y compris l'Internet. Cette licence et cette autorisation n'entraînent pas une renonciation de [la] part [de l'auteur] à [ses] droits moraux ni à [ses] droits de propriété intellectuelle. Sauf entente contraire, [l'auteur] conserve la liberté de diffuser et de commercialiser ou non ce travail dont [il] possède un exemplaire.»

UNIVERSITÉ DU QUÉBEC À MONTRÉAL

LES LOGEMENTS SUPERPOSÉS À MONTRÉAL: L'INFLUENCE DE
L'ARCHITECTURE SUR LES SENTIMENTS DE LIEN ET D'ATTACHEMENT
AU LIEU CHEZ LES RÉSIDENTS ANGLOPHONES DE L'ARRONDISSEMENT
DE VERDUN

THÈSE
PRÉSENTÉE
COMME EXIGENCE PARTIELLE
DU DOCTORAT EN ÉTUDES URBAINES

PAR
POUPAK PARVARESH

DÉCEMBRE 2016

ACKNOWLEDGEMENTS

I owe my sincere gratitude to all those people who have made this dissertation possible and because of whom my graduate experience has been one that I will cherish forever. It is a privilege to be able to thank first and foremost both my peerless supervisor Professor David HANNA and my co-supervisor Professor Benoit DUGUAY for their truly exceptional guidance, encouraging mentorship and precious camaraderie all the way from our first contacts right up to the final submission of this dissertation. I have extremely enjoyed working with them, and I am proud to have had such rare and inspiring role models.

A very special thanks goes out to thank my thesis committee members for all of their absolutely invaluable support, guidance and feedback.

I would like to express my sincere gratitude to Mr. Terrence REGAN, a wonderful person who patiently applied his immense knowledge on proofreading this thesis. His generosity of time and spirit made my PhD experience a profoundly human one. I must also acknowledge my amazing friend Dr. Iman HAJI-ABOLHASSANI, without whose precious support and constant encouragement it would not have been possible to conduct this research. I have been amazingly fortunate to have the continuous inspiration and assistance of my best friend Dr Danièle Boulard to whom I have to express my deepest gratitude.

Heartfelt thanks go to the English-speaking young adult residents of Verdun, Montréal who generously granted me their time for interviews and patiently shared with me their 'Plex' urban experience. A special thank-you goes to all of those who,

in the midst of their busy lives contributed to this research by suggesting contacts and letting me gate-crash their networks to find research interviewees.

Last but never the least, I express the profound gratitude from the deepest part of my heart to my beloved parents for giving me the strength to reach for the stars and chase my dreams.

DEDICATION

I would like to dedicate this thesis to my mother and father, Fahimeh AKHBARIFAR and Jafar PARVARESH who have sacrificed much of their lives to support me through all of my endeavors and adventures - auspicious and otherwise! Without their continued encouragement and support none of this would have been possible.

Table of Contents

ACKNOWLEDGEMENTS.....	ii
TABLE OF FIGURES.....	ix
RÉSUMÉ.....	1
ABSTRACT.....	2
INTRODUCTION.....	3
CHAPTER I.....	10
RESEARCH PROBLEMATIC.....	10
1.1 Guiding idea.....	10
1.2 Hierarchy of concepts and key scientific contribution.....	11
1.3 Plex type housing.....	22
1.4 Choice of borough.....	23
1.5 Choice of population.....	25
1.6 Research objectives.....	28
1.7 Research questions and hypotheses.....	28
CHAPTER II.....	31
MONTREAL'S PLEX HOUSING: THE NOTION OF SUPERPOSED FLATS.....	31
2.1 An overview of the origin and the historical evolution of Plexes.....	35
2.2 The Typical Duplex and Triplex building: A description.....	38
2.3 Plex housing as a home and a neighbourhood.....	42
2.4 What to study in the Plex urban fabric and why?.....	48
CHAPTER III.....	50
WHO LIVES WHERE AND WHY - RESIDENTIAL MOBILITY, SATISFACTION AND HUMAN NEEDS.....	50
3.1 Residential mobility.....	50
3.2 Human needs and motivations.....	64
CHAPTER IV.....	75
SENSE OF PLACE AND PLACE ATTACHMENT.....	75
4.1 Sense of place.....	75
4.2 Place attachment.....	86
CHAPTER V.....	103
RESEARCH METHODOLOGY.....	103
5.1 Methodological strategy:.....	103
5.1.1 Area of interest.....	104
5.1.2 Population characteristics surveyed.....	105

5.1.3 Area of the study.....	108
5.2 Data collection method: Semi-structured interviews.....	112
5.2.1 Sample selection.....	114
5.2.2 Interview themes to explore sense of place and place attachment in traditional Plex neighbourhoods:	117
5.2.3 Ethical considerations:	119
5.2.4 Data Analysis	120
5.2.5 limits	122
5.2.6 Node analysis description	123
CHAPTER VI.....	166
THE PLEX: A VERNACULAR ARCHITECTURE TO LIVE IN	166
6.1 The Plex's physical form and young adults' residential satisfaction:.....	169
6.1.1 Spatial needs	169
6.1.1.1 Stimulation.....	170
6.1.1.2 Transitional spaces: the hierarchy of access and control.....	172
6.1.1.3 Size and scale.....	177
6.1.2. Comfortable housing in response to the physiological needs.....	178
6.1.2.1 Metabolic comfort:.....	179
6.1.2.2 Sonic comfort:.....	181
6.1.2.3 Barrier-free environment:	182
6.1.3 Comfortable housing in response to the psychological needs	183
6.1.3.1 Sense of being at home:.....	185
6.1.3.2 Safety and security needs:.....	189
6.1.3.3 Accessibility:.....	193
6.1.3.4 Affordability:	195
6.1.3.5 Esteem needs:.....	196
6.2 The heritage awareness in the context of Plex environment:	198
6.3 The formal, sensory and symbolic aesthetic of the Plex environment:	202
6.4 The imageability of the Plex buildings:	207
6.5 Conclusion:	210
CHAPTER VII.....	214
THE SOCIAL CONTEXT OF PLEX NEIGHBOURHOODS	214
7.1 Frequency of contacts and social proximity in framing Plex local social networks.....	216
7.2 Sense of community, community ties and social fulfilment.....	221
7.3 Street block, street life and social context of Plex neighbourhoods	225
7.4 Adaptability to the Plex lifestyle.....	229
7.5 Conclusion:	235
DISCUSSION	238
LIMITATIONS AND FUTURE WORK	246

CONCLUSIONS.....	238
APPENDIX A.....	250
MONTREAL'S RESIDENTIAL TYPOLOGIES: THE PLEX FAMILY OF SUPERPOSED FLATS, AS PER THE DAVID HANNA CLASSIFICATION SYSTEM.....	250
APPENDIX B.....	256
MONTREAL ISLAND BOROUGHES AND MUNICIPALITIES, VILLE DE MONTREAL (2015), MUNICIPAL ORGANIZATION, TERRITORY.....	256
APPENDIX C.....	257
PLEX BUILDINGS IN EASTERN VERDUN.....	257
APPENDIX D.....	258
PLEX NEIGHBOURHOODS' POPULATION BETWEEN 29 AND 45 AGE BRACKET IN EASTERN VERDUN.....	258
APPENDIX E.....	259
PLEX BUILDINGS BY PERIOD OF CONSTRUCTION IN EASTERN VERDUN	259
APPENDIX F.....	260
ENGLISH AS A LANGUAGE MOST OFTEN, PLEX NEIGHBOURHOODS OF EASTERN VERDUN.....	260
APPENDIX G.....	261
PLACE OF RESIDENCE 5 YEARS AGO (MOBILITY) IN PLEX NEIGHBOURHOODS OF VERDUN.....	261
APPENDIX H.....	262
INTERVIEW RECRUITMENT DIAGRAM.....	262
APPENDIX I.....	263
SOCIO-DEMOGRAPHIC CHARACTERISTICS OF INTERVIEWEES.....	263
APPENDIX K.....	264
DWELLING BACKGROUND AND HOUSING STATUS OF INTERVIEWEES.....	264
APPENDIX K.....	264
DWELLING BACKGROUND AND HOUSING STATUS OF INTERVIEWEES (CONTINUED).....	264
APPENDIX M.....	266

DETAILED SOCIO-DEMOGRAPHIC INFORMATION OF INTERVIEWEES..	266
APPENDIX N.....	269
INTERVIEW GUIDE.....	269
APPENDIX P	271
INFORMATION LEAFLET	271
CONSENT FORM.....	272
BIBLIOGRAPHY	273

TABLE OF FIGURES

Figure	Page
1.1 Phases of residential mobility, source: Poupak PARVARESH.....	14
1.2 Inner-city residential mobility in response to human expectations and needs..	15
1.3 The conceptualized patterns of sense of place and place attachment	18
1.4 The syntax of sense of place and place attachment models within the Plex environment context, source: Poupak PARVARESH	21
2.1 Model of Chicago "Three-Flat"	33
2.2 Model of Boston "Three-Decker"	33
2.3 Model of Montréal "Triplex".....	34
2.4 Newcastle, England, Tyneside flats type (duplex row)	37
2.5 The vernacular rural Québec with one living unit on each floor	38
2.6 A typical Montréal Duplex	39
2.7 A typical triplex with external staircase and multiple doors.....	41
3.1 The Speare (1974) model for the first stage of mobility decision-making	54
3.2 The Maslow (1954) Hierarchy of needs	65
3.3 The Lang (1994) hierarchy of human needs and design concerns.....	70
4.1 The Shamai (1991) scale for measuring the sense of place	80
4.2 The Scannell & Gifford (2010) tripartite model of place attachment.....	92
4.3 The Connerly & Marans (1985) relationship between evaluation of neighbourhood attributes, social interaction, satisfaction and attachment	95
4.4 Connerly & Marans (1985) Perceived neighbourhood quality model.....	96
5.1 Ratio of Plex housing to the total number of residential buildings in eastern Verdun.....	110
5.2 Building densities: Borough of Verdun, Montréal, Québec.	111
5.3 Selected census zones of Plex neighbourhoods in eastern Verdun and environs	113
5.4 NVivo Nodes	162
6.1 The order in which human senses work (left figure), The taxonomy of human distance in behavioural space (right figure).....	172
6.2 Semi-public territories, the spaces of control and access: Rear lane (above left) front sidewalk (above right).....	175
6.3 Balcony (left photo) and back yard (right photo): examples of semi-private spaces in the Plex environment.....	176
6.4 A Triplex winter look from the third floor, Verdun, Montréal.....	180
6.5 A typical snowy day view of a traditional Duplex in Verdun, Montréal.....	181
6.6 The repeated elements of design in a regular manner, creates a sense of rhythm that gives a dynamic quality to the Plex, Two Triplex buildings in Verdun, Montréal.....	203

RÉSUMÉ

Malgré l'abondance de bâtiments de type Plex (logements superposés) dans plusieurs villes nord-américaines, y compris Montréal, la recherche sur ce type de logement est rare. Le style de vie dynamique et la sécurité qui prévaut dans ce concept de quartier urbain, la variété et l'originalité de ses formes architecturales, l'échelle humaine de ce type de logement, les densités moyennes qu'il atteint, et les différentes formes de propriété qu'il permet peuvent expliquer sa grande popularité et son acceptation par un aussi grand nombre de résidents. Comment a-t-il évolué? Comment a-t-il aidé à orchestrer une sociabilité résidentielle dans de nombreux quartiers? Comment ces environnements sont-ils vécus par les anciens et nouveaux résidents? Voilà quelques-unes des questions auxquelles nous tenterons de répondre dans cette recherche.

Plus précisément, cette recherche analyse et explore le «sens du lieu» et «l'attachement au voisinage» des résidents d'un logement de type Plex dans l'arrondissement de Verdun à Montréal (Québec, Canada). Notre étude a été réalisée auprès de jeunes adultes anglophones âgés de 29 et 45 ans. Nos résultats révèlent que les quartiers traditionnels de type Plex continuent d'offrir un logement accessible, abordable, flexible et recherché par les gens de cette génération. Malgré d'importants changements sociaux à travers le temps, nos données confirment que, comme environnement résidentiel, les logements de type Plex génèrent encore un fort «sens du lieu» pour leurs résidents. Compte tenu de leurs caractéristiques physiques et sensorielles, les quartiers de type Plex sont perçus comme amicaux, ouverts, propices à l'établissement de bonnes relations sociales entre les résidents, et fertiles à un sentiment de sécurité plus fort, la sociabilité, l'habitabilité et la communauté.

Cette recherche contribue donc de façon importante à la recherche empirique sur l'évolution de la valeur des environnements de type Plex pour la planification urbaine et sociale durables tels qu'ils existent actuellement dans de nombreux quartiers et rues de Montréal et de ses proches banlieues.

Mots clés : Environnement de type Plex ; logements superposés ; architecture vernaculaire ; sociabilité résidentielle ; sécurité ; sens du lieu ; attachement au voisinage.

ABSTRACT

Despite the abundance of Plex-type buildings (Superposed Flats) in several North American cities including Montréal, research about this type of housing is scarce. The dynamic lifestyle and security that prevails in this concept of urban neighbourhood, the variety and originality of its architectural forms, the human scale of this type of housing, the medium densities it allows, and the different forms of ownership it features, may explain its broad popularity and acceptance with so many residents. How did it evolve? How did it help orchestrate a social life in so many neighbourhoods? How are these environments experienced by the old and new dwellers? These are some of the questions we will attempt to answer in this research.

More specifically, this research analyzes and explores Plex residents' 'sense of place' and 'neighbourhood attachment' in Verdun borough of Montréal (Québec, Canada). Our study was conducted with English-speaking young adult aged between 29 and 45. Our results reveal that traditional Plex neighbourhoods continue to offer accessible, affordable and flexible housing sought by people of this generation. Despite significant social changes through time, our data confirms that, as a residential environment, Plex type of housing still generates a strong 'sense of place' for their residents. Given their physical and sensory characteristics, Plex type neighbourhoods are perceived as friendly, open, conducive to the development of good social relations between residents, and fertile for a greater sense of security, sociability, livability, and community.

This research contributes significantly to empirical research on the evolution of the value of Plex type environments for sustainable urban and social planning as they currently exist in many neighbourhoods and streets of Montréal and its nearby suburbs.

Keywords: Plex type environment; Superposed Flats, vernacular architecture; social life; residential sociability, sense of place; neighbourhood attachment, adaptability.

INTRODUCTION

Between 1821 and 1931, Montréal faced a mass migration of new populations moving towards the city, mostly from rural Québec and Europe, who were in search of jobs and better living conditions. The arrival of an increasing number of such rural and working class migrants was accompanied by the mass construction of duplexes and triplexes, known in academic literature as 'Superposed Flats' their many variants usually built in rows with no space between adjacent structures.

"These working-class and formerly working-class parts of the city are strung together and defined by a network of balconies; often these are enhanced by outside staircases that curve their way up to the second and third floors. In winter, these staircases make absolutely no sense; covered in snow, they resemble nothing more than icy water slides. But as soon as the spring sun emerges, balconies become the places where life is conducted." (Probyn, 1996:3)

"Balconville"¹ is a term coined by Fennario (1979), who described Plex neighbourhoods as spaces of convergence. The famous quote in this notable play refers to the question of "where you are going for summer holiday?", to which the reply is "Balconville", which refers to the front or back balcony of their duplex flat. Fennario (1979) examines the lives of middle-class Anglophones and Francophones in Montréal. He reflects on Plex neighbourhoods as obviously viable urban spaces in Montréal, where social relations and the family ties of dwellers bring them closer and

¹Balconville is an award winning play written by Canadian playwright David Fennario. The play was first performed in 1979 at the Centaur Theatre in Montréal and is still considered today to be a turning point in English-speaking theatre in Québec. The two-act play takes place in the Point Saint Charles working class neighbourhood of Montréal. The lifestyle the play depicts is perhaps particular to the tenement neighbourhoods of Montréal, but the inferences are universal. The theme of the play depicts a summer in "the Point" focusing on eight neighbourhood families, both French and English and how they deal with their living styles through sharing stories, arguments, philosophies, opinions and such on their cramped balconies, always dreaming about things becoming better. The term "balconville" is still used to describe how many people spend their summers in Québec. (Needles, 2003)

can be negotiated. He also suggests that Plexes may help overcome the traditional hard line of linguistic separation between “*les Anglais et les Français*”.

In the present early 21st century, multiple factors such as gentrification and youth migration draw a heterogeneous collection of inhabitants to the traditional Plex working class neighbourhoods of Montréal. They are not necessarily strictly working class neighbourhoods anymore, yet the “Balconville”, the Plex housing style, still remains constant with its ‘spaces of convergence’ as we will see. It could be assumed that this type of neighbourhood is able to embody the values that are appreciated in many urban milieus within Montréal. Plex housing has a highly recognizable architectural form, with a well-defined shared space in the more public frontage and a semi-private shared space in the back. Beside its unique physical form, this type of housing embodies a mixture of the public-private and personal-common mode of life, which in so many ways create the vernacular of the urban landscape of Montréal and uniquely defines its North American urban architecture (De La Riva et al. 2000).

There is a surprising absence of discussion of the historical evolution of Plex buildings, how this residential form has orchestrated the social life of neighbourhoods and how these small oftentimes owner-occupied environments are experienced by the dwellers. (Hanna and Dufaux (2002) are amongst the only researchers who have dealt with the historical evolution of Montréal’s Plexes in a comprehensive fashion. In their CMHC report, they carefully traced the Montréal Superposed Flats’ origins to Western France and Scotland, while documenting the evolution in design in the local Montréal context.

Despite such benign historical neglect of the evolution of the social and urban planning value of Plex housing, this thesis wishes to investigate and further explore the sense of place and place attachment of a traditional Plex neighbourhood in

Verdun, Montréal, Québec, particularly amongst their English-speaking young adult dwellers. This thesis aims particularly to explore the way in which English-speaking young adult dwellers have used the Plexes' specific physical environments to build social ties and develop closer relationships amongst neighbours. The concepts of 'sense of place' and 'place attachment' will shed light on the life between Plex building and the ways English-speaking young adult residents understand and interpret this lifestyle and are affected by it.

The Interdisciplinary Doctoral Program in Urban Studies leads us to study the relevant literature from the fields of human geography, urban sociology, anthropology, social psychology as well as architecture with regards to the works of classic and recent scholars. Reviewing this literature is our primary reference and the basis for a conceptual framework that helps to understand the Plex environment's life on the basic fragments of block-by-block residential interfacing as well as on the broader neighbourhood level.

This thesis is structured into a seven main chapters. This first chapter will elaborate upon the research problematic, including guiding ideas, research questions, hypotheses and objectives, which will be more clearly articulated. The next three chapters set out the foundations of our theoretical framework and present a critical review of the literature. Chapter two will problematize the notion of Superposed Flats, which are a very common type of housing for large North America cities, mostly constructed during the nineteenth century (Wegmann, 2006).

In this chapter we will sketch out the Plexes of Montréal, as a predominant and traditional form of housing in the city, both in the context of individual homes as well as in the context of neighbourhoods. Providing wider overview in this chapter of the Plex's narrow range of literature will help to explain why we chose to study Plex

buildings at the residential and neighbourhood level and how this research may further contribute to expand urban studies literature in this neglected area.

Chapter three will examine the patterns of intra-urban mobility, the residential mobility decision-making process, human needs and motivations theories, and the residential satisfaction related literature. Following this theme, we will attempt to illustrate how urban scholars have tended to approach the questions of why people move to specific locations and how they chose to reside in a particular neighbourhood.

Understanding the patterns of intra-urban mobility is mainly done through the research of Lu (1998a); Cadwallader (1992) and Rossi (1980). Without examining the economic factors, this thesis will attempt to reconcile residential mobility with human needs and motivations theory, through the writings of Lang (1994) and Maslow, (1954) and human satisfaction theories modeling with Speare (1974).

In this thesis the gentrification process is accepted as one of the main aspects of residential displacement in inner-city neighbourhoods. Mostly cited are the works of Ascher (2010); Bondi (1991); Karsten (2007) and Rose (1984). These specific parts of the literature address the concept of gentrification with a special emphasis on the alternate lifestyles of gentrifiers. However, the gentrification process is not the primary interest of this thesis because it is not directly related to the architectural-social convergence this thesis is looking to analyze more comprehensively. In this present research, residential choice will be studied within a wide variety of non-traditional households and alternate lifestyles of young adult residents of traditional Plex neighbourhoods. This will further help to illustrate the Plex neighbourhoods' specific forms and functions (Hanna and Dufaux, 2002; De La Riva, 2000) and examine whether or not they satisfy the needs of English-speaking young

adult residents. Chapter four will explore the notion of ‘sense of place’ and postulates reconciliation between this notion and the multidimensional concept of the ‘place attachment’ literature mainly through the works of Scannell & Gifford (2010); Mazanti (2007); Coolen (2004); Shamai (1991); Alexander (1980) and Relph (1976) .

The fifth chapter examines the methodology used in developing the research questions and concepts while operationalizing them into an empirical exercise. We will introduce the specific area of the study, as well as the population characteristics surveyed. We will describe the methods of data collection, which were used in conducting the 35 in-depth interviews and the performance of the relevant census data. The use of interviews as a method of data collection raises specific ethical questions, which will be addressed in this chapter. This chapter will also provide a reflection on how we oriented our study towards a methodical qualitative research approach using NVivo to analyze our research material.

This thesis will propose that the enrichment of Plex residents’ ‘sense of place’ can contribute toward intensifying the patterns of positive neighbourhood attachment. Thus, the human-space relationships in a Plex environment will be investigated through the multidimensional concept of ‘attachment’ with specific attention to the place-based, person-based and psychological-based aspects of this notion amongst English-speaking young adult residents.

Chapter Six will present our findings within the Plex spatial environment. The physical layouts of the Plex environment will be examined, in order to verify the levels of satisfaction in human spatial needs. Moreover, the distinctive architectural form of Plex buildings will be investigated in an attempt to ascertain the reasons why English-speaking young adult residents might be connected to these old established environments with their unique architectural attributes. This chapter will also explore

the intensity of English-speaking young adult residents' perception in terms of comfortability, a sense of security and a sense of being at home and belonging to their residential environment. In addition, the heritage awareness of young adults in the old established Plex neighbourhoods and the ability of the Plex environment to deliver the aesthetic notion of beauty will also be examined.

Chapter Seven will focus on the social context of Montréal's old established neighbourhoods with a specific emphasis on English-speaking young adult residents of Verdun. The social life of the neighbourhood with regard to the way that residents meet their social needs, and the way Plexes' unique architectural form and physical layout have an impact on the social life of the residents, will be further examined. In this chapter the intensity of the sense of community and neighbouring in response to the affiliation needs of young adults will be addressed. Yet, the social fabric of old established Plex neighbourhoods in terms of contact frequency and casual types of social contacts, the heterogeneity and the social mix of this residential environment and the quality of street life in such an ambiance will be highlighted. Subsequently, the possibility and intensity of English-speaking young adult residents' aspirations toward Plex neighbourhoods will be examined and analyzed.

In conclusion, by attempting to examine the 'sense of place' and patterns of 'place attachment' amongst English-speaking young adult residents of traditional Plex neighbourhoods of Verdun in Montréal, this research attempts to fill a part of the void in the analytical knowledge of Plex neighbourhoods as a preferred choice by English-speaking young adults. In sum, we will discuss the kinds of lifestyles offered within a Plex environment and the way that English-speaking young adult residents of old established Plex neighbourhoods are adapting to it. We will discuss the adaptation to the Plex lifestyle as subjectively perceived through the behavioural changes in residents' notion of tolerance, privacy and territory.

The desired outcome of this research is to bring further attention to Superposed Flats as an enduring and attractive form of housing for yet another generation of inhabitants, having already very successfully housed at least six other generations since the great migration of 1821 and thereafter. Highlighting the issue of residential mobility towards Plex neighbourhoods, the patterns of social interaction among neighbours and the sense of place that residents develop through living in a Plex environment, this research aims to further confirm the important role of Plex neighbourhoods as a continuing viable part of the unique urban landscape of Montréal, hopefully moving into a more sustainable, community-based, future.

CHAPTER I

RESEARCH PROBLEMATIC

1.1 Guiding idea

The main goal of this research is to explore and highlight the human-environment bonds that thoroughly exist inside a Plex neighbourhood and contribute to giving its residents a specific heightened sense of place. It also aims to examine whether and how the architectural form of Plexes may positively impact the social life of the whole neighbourhood and may enhance the patterns of attachment amongst their residents.

We have chosen one of Montréal's traditional Plex neighbourhoods to explore the concepts of 'sense of place' and 'place attachment' amongst the English-speaking young adult residents' perspective of such environments. The reason behind this choice is based on the fact that Plex neighbourhoods, as a distinct architectural form of housing, have long been ignored for the most part by academics in the field of urban studies literature. The absence of detailed studies about Plex neighbourhoods is surprising amongst specifically classic urban scholars who have written extensively about the development of American cities historically and up to our current era, yet some of the most well-known North American cities such as Chicago and Boston are dominated by such housing. This lack of documentation makes it difficult to do a comprehensive historical analysis of Plex neighbourhoods in the context of contemporary urban life. Moreover, there is no significant study to reference with

regards to the notion of 'sense of place' on a detailed analysis of the social life of their residents and their perception of the quality of living in Plex neighbourhoods.

This research proposes to also go about analyzing questions concerning geographical location, population and language characteristics. According to Wegmann (2006) Plex housing with its variety of configurations (mostly as duplexes, triplexes and their derivatives) shapes countless residential streets in Montréal and suburbs and may be found in almost every neighbourhood from the oldest to the newest. Inspired by the uniqueness of external spiral staircases, these popular forms of housing create a special urban landscape all of their own, becoming a standing symbol of vernacular architecture in Montréal (De La Riva, 2000). This research addresses gaps in the literature on Plexes, new residential patterns in older central neighbourhoods and the existing place attachment therein. It also explores Plex residents' degree of recognition of their 'sense of place' and their future aspirations towards this urban environment.

1.2 Hierarchy of concepts and key scientific contribution

The first part of our former review of the literature emphasized the significant findings concerning an ongoing movement of residential mobility and its related decision-making process. The vast segment of this literature has highlighted the predominant reasons of residential mobility as an adjustment to changes in people's family life cycle; their personal/individual life pathways; and sudden changes in their socio-economic status (Lu, 1998a; Cadwallader, 1992; Gober, 1992; Beauregard, 1990; Rose, 1984; Speare, 1974).

This part of the literature is more concentrated on middle-income residents, generally nuclear families with traditional life-style choices who are part of the private housing market. According to the literature, the selection of a desired location by persons seeking residence is mostly limited to specific areas for which they have a certain degree of familiarity. Also, young people in large urban cities are often highly mobile, but residential mobility may create any one of a number of challenges; employment, educational facilities, transports or other essential services, increased housing costs, and increasingly limited social. On the other hand, the segments of the population that have chosen to follow alternative life-style choices and do not correspond to the traditional norms and social patterns of nuclear families have been examined most closely in the context of the literature surrounding the urban gentrification process. It has been shown that people moving into gentrified neighbourhoods are mostly single or two person households or childless middle-class professional couples. As this part of the literature mentioned, residential mobility towards gentrified neighbourhoods is a reflection of a particular urban lifestyle, corresponding to individualized personal taste, values and social opportunity seeking. The literature on gentrification in urban environments has also shown that there exist certain heightened levels of tolerance for unconventional lifestyles in gentrified urban neighbourhoods, a parameter which seems to be either attractive or not a factor for many inner-city movers (Beauregard, 1990; Rossi, 1980; Speare, 1974).

Current literature related to residential mobility extensively discusses the notion of 'residential satisfaction' as a primary factor in a households' mobility decision-making process. Dissatisfaction with various small and large attributes of the housing unit, or the residential environment, can be highly influential negative factors in the decision and determination of where to relocate. The post-move stages have also been examined in order to develop a more thorough assessment of the contrast between the

pre-conceived perception of a new dwelling with its actual 'lived in' experience - and also in comparison with former places of residence. However, the social status of a neighbourhood, the potential household social bonds within it, the costs and organization of moving, may encourage dissatisfied people to reconsider the decision to move and perhaps modify their residential aspirations. Likewise, current literature has also placed strong emphasis on the fundamental role of motivations, expectations and needs in determining behavior related to residential choice. Reviewing the literature illustrated that, residential mobility, like other human behaviors, is an innate response to satisfy a complex array of basic existent needs. Integrating the hierarchical model of human needs within design concerns, serves as an essential base in order to properly attempt to evaluate, analyze, and arrive at determinations concerning human socio-spatial needs (Karsten, 2007; Gober, 1992; Rossi, 1980; Kennedy, 1975).

Detailed qualitative accounts of residential mobility experience from traditional neighbourhoods to the inner city are largely absent from this array of literature, especially for young professionals. Furthermore, there is not enough knowledge on the extent to which this group may achieve satisfaction of their needs and fulfillment of their expectations. is the same is true of the perceived effect of their residential choice on the development of their social ties in a new neighbourhood or area of residence.

In Figure 1.1 we synthesize the phases of residential mobility and the ongoing decision-making process. This figure is drawn from the patterns of human needs satisfaction and development of human-environment emotional bonds. As this thesis attempts to explore human-environment relationship within traditional Plex neighbourhoods, the financial criteria are not taken into account in our model.

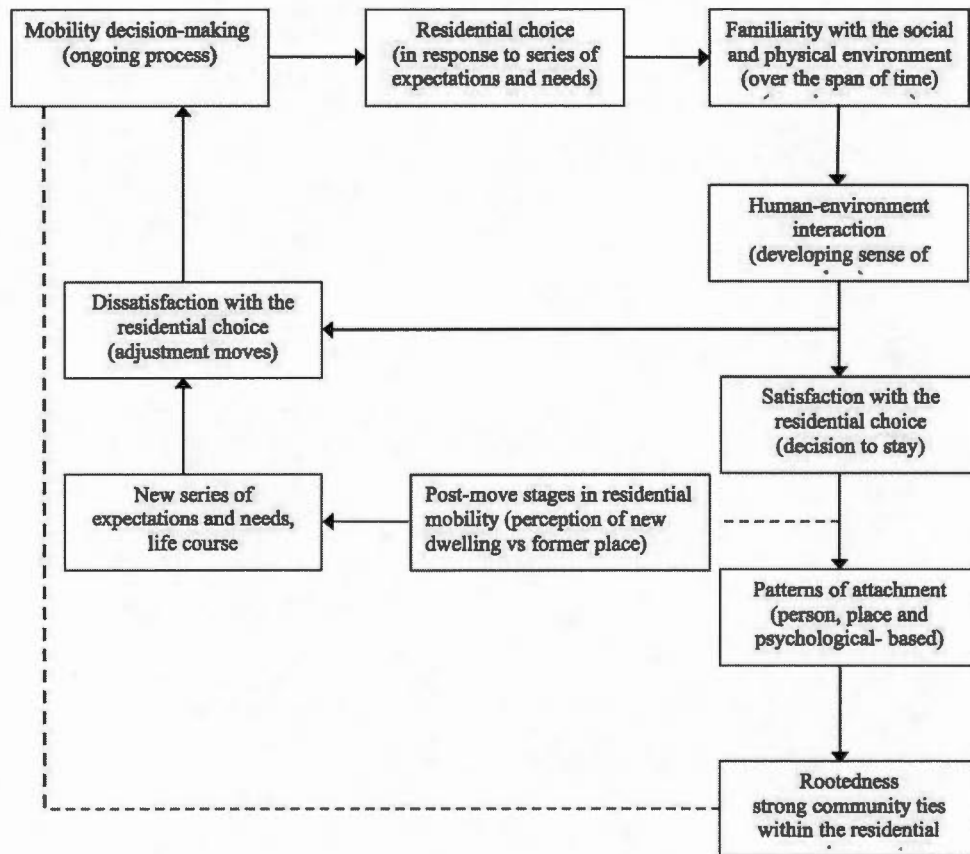


Figure 1. 1 Phases of residential mobility, source: Poupak PARVARESH

The adjustment moves, voluntary displacement and gentrification literature suggest future qualitative studies exploring the way young urban professionals are fulfilling their social and spatial needs and expectations. Furthermore, due to the increasingly diverse forms of household compositions and alternate lifestyle choices, there is a greater need to explore the patterns of social inclusion and acceptance on the increasingly socially diverse milieu of many rapidly changing traditional inner-city neighbourhoods. Qualitative approaches are also needed to grapple with the notions of tolerance and adaptability among locals and newcomers of the aforementioned neighbourhoods. Likewise, it is important to study the association of the variety of lifestyles and social status of an increasingly highly mobile post-industrial society,

with an evolving sense of place for both local residents and in-movers. Residential mobility, as Figure 1.2 illustrates, is generally in favor of satisfying a variety of human needs or expectations. Within particular sub-groups, this chart demonstrates the importance of applying a human needs model to studies concerning the reason why people move and their residential choices.

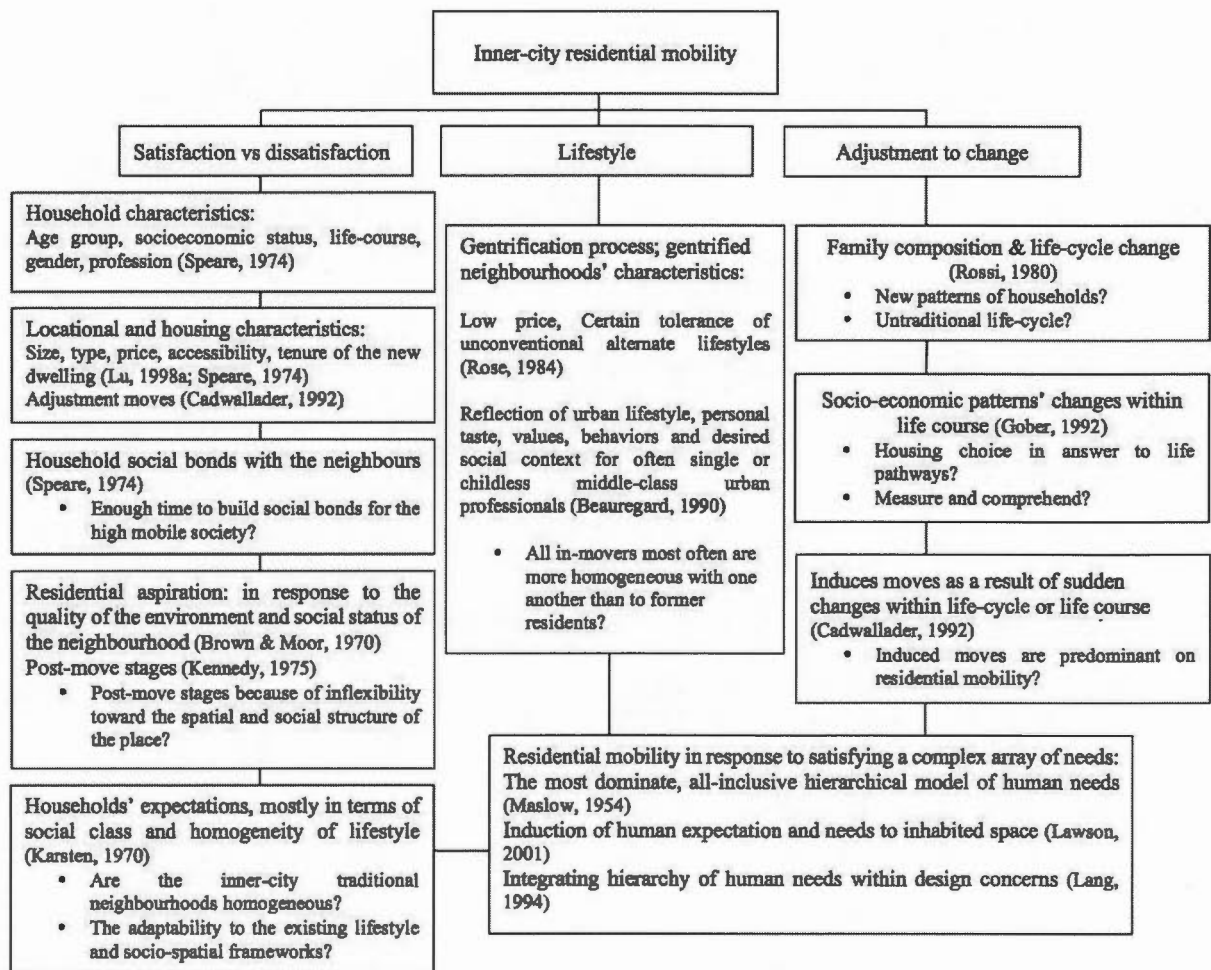


Figure 1.2. Inner-city residential mobility in response to human expectations and needs

Induction of human needs and motivations literature into residential patterns shows that residential satisfaction encourages affective bonds between people and places. The 'sense of place' literature has widely addressed these emotional bonds in human-environment interactions, typically argued to be constructed through individual experiences, shared memories and meanings. Reviewing this literature illustrates the emphasis of human behavior and the social and psychological processes, where the role of physical environment has been mostly neglected. In the context of inner-city neighbourhoods, it is still unclear whether the particular physical and spatial environments of these places contributes to construct a significant 'sense of place' for their inhabitants. Furthermore, the literature suggests that developing a 'sense of place' is linked to the particular phases in which long-term residents and recent in-movers begin to become acquainted with each other. Although spatial proximity does not necessarily lead to social closeness amongst residents, the outstanding question concerns the significance of the role of socio-territorial factors, such as the private to public transition within the physical proximity of the shared spaces on promoting social bonds within neighbourhoods (Scannell & Gifford, 2010; Carter et al., 2007; Mazumdar, et al., 2000; Hay, 1998; Shamai, 1991; Alexander, 1980; Tuan, 1980; Relph, 1976; Lynch, 1970).

The last part of reviewing the urban sociology and urban geography literature has highlighted the notion of 'place attachment' in a multi-dimensional framework composed of person-based, place-based and psychologically based descriptions. This part of the literature reveals that people do not become directly attached to the physical features of a place but rather to the meanings that those features represent. 'Place attachment' is then more properly thought of as a proximity-maintaining identification towards specific places, which facilitates social interactions and embodies the common symbols, values and shared experiences of people. Accordingly, social dimensions of 'place attachment' are oftentimes maintained to be a stronger influence than the physical dimensions. Yet, there is a strong need for

future research to more comprehensively investigate the changing social context of traditional inner-city neighbourhoods in relation to the development or maintenance of the concept of social and physical 'place attachment' in different neighbourhoods.

Our conceptual framework draws upon the discussion of the above-mentioned literature and draws together different concepts from contemporary urban geography and urban sociology. Figure 1.3 summarizes these concepts that further structure our exploration of the human-environment relationships in terms of 'sense of place' and 'place attachment' in Montréal's traditional Superposed Flats environment. We have used our extensive review of the literature to explore reasons why people move and the way they develop social bonds within their new residential place.

This enabled us to improve existing conceptualizations of human-place relationships, and apply this knowledge to the Plex environment. Meanwhile, the preceding review of our literature introduced 'Superposed Flats' not only as historic physical habitats, but also as a unique, close, residential environment which precipitated a significant number of unplanned social encounters and casual shared interactions among residents. The communal spaces of Plex buildings (The balconies, doorsteps, the galleries, back yards and outside stairs) and the residential proximity of this non-isolating physical environment, serve as unique horizontal and vertical catalyzers for social interaction between dwellers and their highly visible semi-private lives.

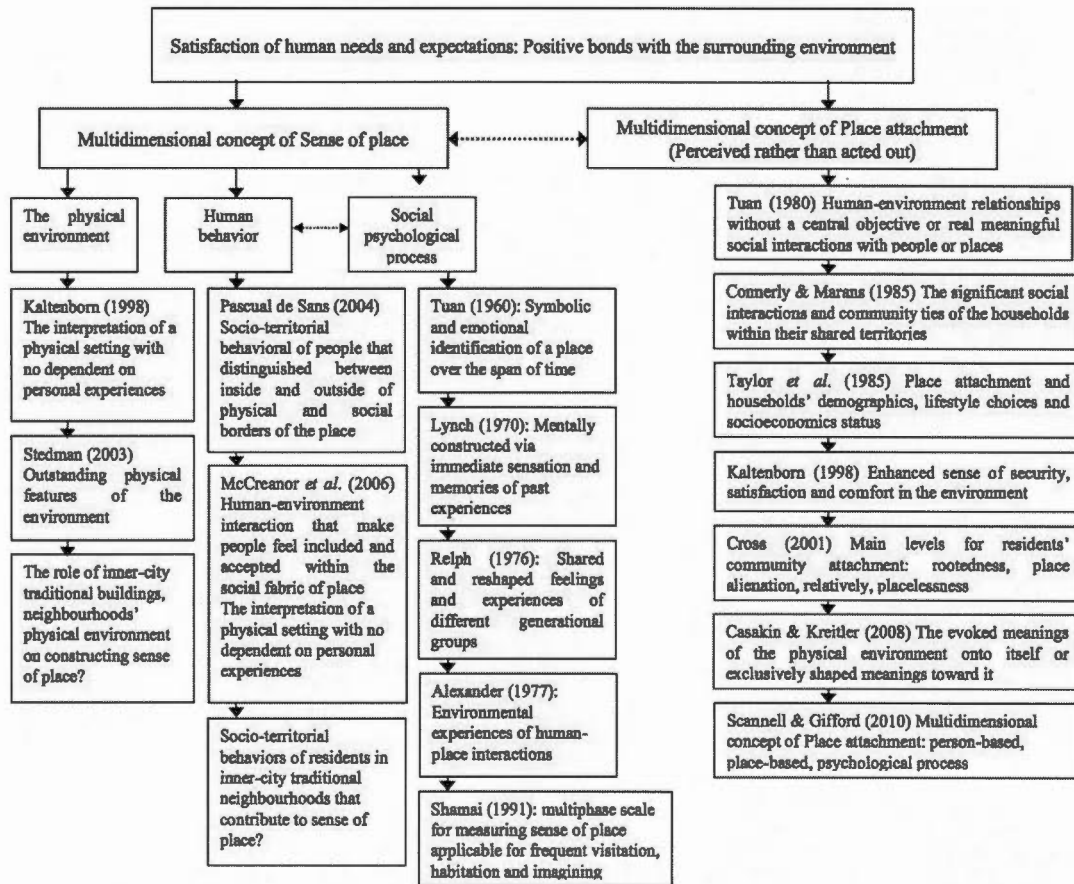


Figure 1.3 The conceptualized patterns of sense of place and place attachment

These specific physical and spatial features are critical to study for their contribution of promoting 'sense of place' and 'place attachment' in the Plex environment. A key scientific contribution of this study is the conceptual refinement of human-environment relationships in terms of developing a far greater 'sense of place' and 'place attachment', component applicable to our study of traditional inner-city Plex neighbourhoods (please refer to Figure 1.4 below).

'Sense of place' has been defined generally as a conceptualization of both what is seen and the way in which it is seen, a definition that contains both the dimensions of the physical spaces and the perceived human actions in the character of locales. We will examine more closely 'who sees', which refers to the individual characteristics on human-environment dual relationships. Furthermore, as previously mentioned, the multidimensional concept of 'place attachment' is notably studied as a proximity-maintaining behavior towards specific places through person-based, place-based, and psychologically based dimensions. our contribution to scientific knowledge lies in a deeper understanding of human needs satisfaction within the three aforementioned dimensions of attachment in the Plex environment. This offers a new understanding of the role of residential satisfaction of human needs in evoking meanings and values and promoting memories and shared experiences, thus embodying the 'sense of place' and 'place attachment'. Combining physical, spatial and social syntax analyses of the Plex environment is a novel way to challenge the human-environment interactions of the younger generation of residents in so-called traditional neighbourhoods.

To understand the notion of human-environment interactions in the Plex context, we decided to investigate the population of residents living in Plex traditional buildings, both in the context of a specific residential place and of a larger neighbourhood. To analyze the personal profile and lifestyles of our population we reviewed and

overlapped the profound literature presented by Karsten, 2007, Cadwallader, 1992, Gober, 1992, Beauregard, 1990, Connerly & Marans, 1985, Taylor et al., 1985, Rose, 1984; Rossi, 1980, and Speare, 1974. Through these authors we mainly categorized our data in terms of age, gender, profession, parental status, ownership, tenancy status, previous residency type and experience and the length of residency in the Plex environment.

Exploring the direct relationship of the outstanding physical and spatial features of the Plex environment and development of a 'sense of place' and 'place attachment' has a particular place in this thesis. Therefore, Stedman, 2003, Kaltenborn, 1998, Connerly & Marans, 1985, and Speare, 1974, have served as a valuable support to extract relevant information about Plex traditional buildings. This information mainly included flat type, flat level, flat renovation status, and outdoor appendages, as well as the neighborhood's perceived liveability, safety, accessibility, affordability, and attractiveness.

Lastly, Figure 1.4 serves to hierarchize concepts related to the formation of sense of place and place attachment. The human-environmental interaction in the Plex unique physical and spatial context is broken down into spatial, social, psychological and cultural categories. Our review of the literature has highlighted findings about the ways in which dual human-environment relationship has proceeded; within our theoretical framework, Scannell & Gifford, 2010, Childress, 2004, and Pascual de Sans, 2004, are the most inspiring sources for analyzing the ways in which people relate to a place. This part of our conceptual framework is predominantly concentrated on the socio-spatial and socio-territorial fabric of the neighbourhoods, with a specific examination of the transitional zones, physical proximity, and the way

that the physical features of the Plex buildings are conducive to a particular life in between them.

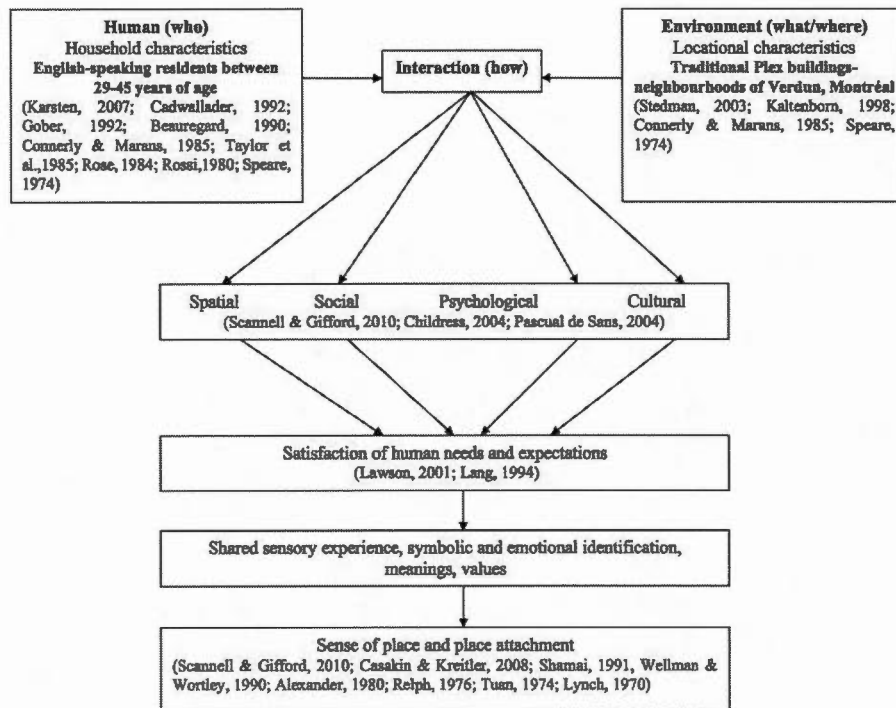


Figure 1.4 The syntax of sense of place and place attachment models within the Plex environment context, source: Poupak PARVARESH

It will also assist us to explore the “Plex lifestyle”, and the urban culture of this traditional environment, and the cultural process by which the residents may tolerate, adapt to, or appreciate it. We then applied the revised version of Lawson, 2001 and

Lang, 1994, model of human needs and expectations to evaluate the satisfaction degrees, residential aspiration, and post-move stages of residents from old established Plex neighbourhoods. Using the pertinent sub-categories of this dual model cultivates a dynamic understanding of the ways in which the Plex environment holds meanings and promotes particular spatial and socially shared experiences for the residents. Together, with the symbolic and emotional bonding that may have evolved over time for different generational residents, we will elucidate the notion of 'sense of place' and 'place attachment' in this environment.

1.3 Plex type housing

In the context of neighbourhood housing comparisons, Plexes are more versatile than single-family row houses, more human-scaled and spacious than apartments in apartment buildings and capable of far higher density than detached or semi-detached single-family homes. This type of housing offers a distinct tenancy structure with the owner of the building often residing in the first floor flat and the tenants in the ones above (DeWolf, 2007). More recently, however, all residents in older or newer Plexes may actually be co-proprietors of condominiums that can accommodate various functions such as mixed residences and small businesses and also has been adapted to various forms of ownership, including the now-popular condominium co-ownership forms. Plexes also seem to appeal to a wide spectrum of cultural groups and to different income levels. Plexes can offer a unique opportunity to bring together landlords and tenants, often under the same roof, which is rarely found in other forms of housing (Hanna and Dufaux, 2002). Montréal Plexes are still seen as an outstanding type of housing that remains in favor among city dwellers at a time when many of our neighbourhood values are being questioned.

Hanna and Dufaux (2002) state that Plex type dwelling-units have flexible layouts are relatively well suited to a variety of lifestyles and types of ownership, are seemingly endlessly adaptable to inevitable changes which occur in the lives of families and individuals as well as in the most of society as a whole. In addition, the occupation densities of Plex neighbourhoods are high and the lifestyles encouraged and generated by this type of housing are dynamic ones.

With a geographic spread limited to only a few large North American cities (notably Montréal, Québec, Boston, New York, Richmond, St-Louis and Chicago, as well as a host of lesser cities) the Plex tradition has never ceased to expand in those cities (Wegmann, 2006). Contributing heavily towards making human-scaled streets and neighbourhoods, Plexes have continued to develop as a viable form of housing in Montréal over the course of almost two centuries of city building (Hanna and Dufaux, 2002; Hanna, 1986).

1.4 Choice of borough

Perhaps the best model of a lively Plex neighbourhood in Montréal is the Plateau Mont-Royal district. This borough with 100,390 residents, spread out over an area of 8.1 km² is the most densely populated district of the city of Montréal.³ Yet its skyline rarely reaches over three storeys. Meanwhile it also has the youngest borough or municipal population on the island of Montréal, with a high percentage of well-educated residents including many artists, university students and young families.⁴

³ Ville de Montréal, the Plateau Mont-Royal district, Sociodemographic profile of 2011

⁴ Indeed, the 28% of the population in this borough is between 25 and 34 years old, while the proportion of the same age group is about 17 % in the city of Montréal. The average of the age group in the Plateau Mont-Royal is 34.1 years compared to the city of Montréal, which is 38.6 years.

The Plateau Mont-Royal's dense urban landscape is composed predominantly of two and three story row houses, organized as superposed flats, known as Plexes. Statistics Canada (2011) states that more than half of the dwellings in this area were built before 1946. However, the unique and special character of the built environment and its dynamic lifestyle attract many young people to this older neighbourhood. There is a large amount of urban literature based on the Plateau Mont-Royal, specifically in the context of its gentrification process, the conserving and enhancing of its historic urban landscape and social and housing aspects of the borough (Laterreur, Schwartz, Laurin, & Bronson, 2008). However, our research does not aim to focus on this literature other than as a basis of reference. Instead, it does consider the Plateau Mont-Royal as one of Montréal's most successfully preserved and developed Plex areas, constituting a clear residential choice made by many young people.⁵ The dynamic commercial zones and sociable residential streets contribute to the quality of life, which constitute the main elements drawing young people into the Plateau (Van Crieking & Decroly, 2003; Ley, 1994), not to mention its proximity to downtown and its universities.

In the light of the Plateau Mont-Royal's particular built environment and the adaptability of its older types of housing to a younger generation's lifestyle, this research attempts to contribute to the debate by focusing on younger mobile populations who are opting for and living in other Plex neighbourhoods in and around Montréal, many possibly for the first time. The goal is to better understand the deeper reasons which encourage younger people to be choosing Plex neighbourhoods,

5 Statistics Canada, 2006 Census of Population, Catalogue no. 94-556-XPB

beside the economic aspects. Because of the lack of contextualized case studies, the eastern part of Verdun, which is heavily composed of Plex housing, became a prime candidate for study. This choice will be further justified in a more detailed manner in the methodological framework section. Having selected the Verdun borough as our choice of traditional Plex neighbourhood, we needed to choose a scientifically valid population for more comprehensive study.

1.5 Choice of population

Some studies like Beaujot, McQuillan, & Ravanera (2007) and Foot & Stoffman (1996) note that Canada is undergoing a major transformation from a predominantly young to a predominantly aged society. At the same time the Statistics Canada, 2011, Census of Population shows that those who were born between the periods of the late 1960s to the late 1970s numerically form the largest part of Verdun's population. We have selected this age group, known as young adult (commonly abbreviated to Gen X) as the population under study. More specifically, the population's age ranges between 29-45 years old. Generation X descriptions will be discussed in full detail in the methodological framework.

Furthermore, Montréal is adjusting to the larger-scale ethnic diversity (Dere *et al.*, 2010). As a result, there is an increased understanding and social interaction between Francophone and Anglophone communities, mainly through the process of acculturation.

"Acculturation is generally referred to as the processes of cultural change that takes place as a result of continuous and direct contact between individuals with different cultural origins" (Ibid: 134).

Berry (1992) develops and validates a bidirectional model for acculturation in Canada in which changes occur within both groups who remain in constant contact with one another. This model explains how in the acculturation process people have two separate cultural orientations. One is their heritage culture, which is the primary culture of their personal or family origin, and the second one is the mainstream culture, the dominant regional or national culture. This study assumes that a person's relationship towards their heritage culture and the mainstream culture can vary independently. The process of acculturation involves Montréal's diverse community groups and influences the way that people orient themselves towards their urban environment. According to Zucchi (2007) the patterns of settlement for the immigrants of Montréal show that British immigrants formed clearly identifiable neighbourhoods in different parts of the city, notably Verdun.

"Each of these enclaves remained institutionally self-contained, with first-and second-generation, British immigrants outnumbering English but not French Canadians. These districts also comprised a significant number of other immigrants from southern and eastern Europe" (Zucchi, 2007: 10).

As he notes, in these neighbourhoods, the British immigrants showed considerable interest in concentrating on certain streets with higher-quality housing. They were located mostly in places in which British ethnicities and British identities were represented and recreated. The psychological distance from downtown and the acceptable residential proximity led British immigrants to turn inward toward their neighbourhoods in order to grow and remain closer, form friendships and further maintain identification with one another. Zucchi (2007) states that Verdun is one of Montréal's large boroughs that boasted the highest concentration of British immigrants in Montréal by the end of the nineteenth century and offered a wide range of sports clubs, Scottish and Welsh choirs, Scottish, Irish and English societies,

political clubs and other Canadian associations that engaged many British immigrants, while further drawing more of them into the city.

The term 'Anglo' according to Radice (2000) is currently used in two distinct ways. It could be a linguistic marker that refers to the speakers of English language from all kinds of origins. However, it may also point to an ethnicity of Anglophones of English, Anglo-Saxon, British or Anglo-Celtic origin. Scowen (1991) terms 'Anglo-Québecer' as those regardless of their country of origin as well as their ethnic origin, who live predominantly in English within Québec and wish to continue to do so.

While Radice (2000) puts more emphasis on 'Anglo-Montréalers', which refers to the ethnic group of Anglo-Celtics to whom many Montréalers belonged to almost forty years ago. According to her, this group shaped the urban fabric of Montréal, however, since the 1960s, the proprietary relationship of this group to Montréal has dramatically changed.

In this research, it is important to clarify the term 'Anglo' and the way English-speaking people are defined. Hence, we chose our population study from the group of young adult residents, whose first or most frequent language is English at home from any given country of origin, who are currently living in Plex neighbourhoods of Verdun, Montréal. The Census of Canada (2006) demonstrates that numerically young adults form the largest part of Verdun's population. As well it shows that nearly 30% of the population of Verdun is composed of English-speaking people. Overlapping these two demographic tables, this research focuses on the traditional Plex neighbourhoods of Verdun to study the notions of sense of place and patterns of place attachment, particularly within local minority English-speaking young adult residents.

1.6 Research objectives

- To survey the human interaction within the physical and spatial context of Plex neighbourhoods in order to examine the perceived distinctive character and sense of locale amongst residents.
- To verify the specific elements of the established Plex neighbourhoods which residents feel a belonging towards, an interaction with, a connection to, and the roles they play in constructing their patterns of attachment.
- To examine the human responses to the Plex' transitional zones that flow between private to public territory which promote and encourage social interactions .
- To explore the existence of possible attitudes of tolerance which flow from the physical proximity of the shared spaces and to the frequency of casual contacts in that environment.

1.7 Research questions and hypotheses

Question 1: Why do English-speaking young adults choose older established types of housing environments made up of duplex and triplex flats?

- What are the main thoughts, values and preferences involved in the decision-making process of English-speaking young adults in their residential mobility choice of Plex neighbourhoods?

Hypothesis 1: Affordable housing, flexible tenure structure, convenient accessibility and an attractive urban landscape, are primary factors in the mobility decision-making process sought by many segments of the younger groups of residents.

Question 2: How do English-speaking young adults fulfill or alter their human needs and expectations of a residential area by living in a Plex neighbourhood?

- In what sense does the specific type of housing available in Plex neighbourhoods enrich or detract from the individual expectations and social life of its residents?

Hypothesis 2: The variety of human scale housing types, the sense of safety and security in medium density superposed flats neighbourhoods, and the ethnic plurality and dynamic social life of them, are all contributing factors to residential satisfaction of young adults in Plex neighbourhoods.

Question 3: How strong is the relationship between the physical and spatial characteristics of the Plex environment of Verdun and the development of a sense of place for young adult residents?

- Does the particular architectural form contribute significantly towards developing a 'sense of place'? And if so, how?
- What is the strength of the Plex's particular social atmosphere in the development of a 'sense of place' and 'place attachment' for its English-speaking young adult residents?

Hypothesis 3: The typical semi-private/semi-public architectural features of the Plex buildings constitute privileged social interactive spaces amongst the neighbours and passers-byers, which may be conducive to the development of community ties within Plex socializing environment.

Question 4: How much do the English-speaking young adult residents of Plex neighbourhoods adapt to the particular lifestyles that exist within this environment?

- Does the Plex's architectural form change the behavioural patterns of its residents in the context of privacy, territory and social tolerance? And if so, how is this manifested?

Hypothesis 4: Old established Plex neighbourhoods offer a lifestyle of their own. Human behaviour in response to this lifestyle may show an adaptation of different privacy-maintaining and territorial standards, both for the locals and the newcomers.

CHAPTER II

MONTREAL'S PLEX HOUSING: THE NOTION OF SUPERPOSED FLATS

“In the nineteenth century, every country and perhaps even every large city produced its own type of housing, suited to the economic, social and cultural conditions of the majority of its population [...] it covers large areas of the towns and bestows on them a part of its own identity and character” (Marsan, 1990:266).

In the large North America cities of the nineteenth century the most common type of housing is referred to as ‘Superposed Flats’ (Wegmann, 2006). He uses Superposed Flats as a generic term to describe a dominant housing form in cities such as Boston, Chicago, parts of New York and Montréal. Basically, ‘Superposed Flats’ refers to small multifamily buildings with a variety of regionally specific names, originating in Europe, with the following common characteristics:

“Each apartment receives natural light from at least two sides, the front and the back. Each apartment is accessed without elevators or internal corridors. Each apartment shares a street entrance and stairwell with no more than five others” (Wegmann, 2006: 10).

David Hanna had previously defined what he refers to also by its generic moniker of “Superposed Flats” in his seminal work on Plexes titled “Montréal, a Rich Tradition in Medium Density Housing” (Hanna and Dufaux. 2002), tracing the European origins of Montréal’s Plexes (Scotland, France), their deep Montréal origins stretching back to the 18th century, and geographical distribution in the 19th century, together with a host of methodological questions about housing research:

“Superposed Flats are defined here as meaning full-depth front-to-back rental accommodations stacked one atop the other (usually two to four such flats) and often attached in pairs (side-by-side) as well, within the confines of one house”.

Hanna goes farther and defines the difference between “flats” and “apartments” in housing, a subject giving rise to much terminological confusion, as evidenced in the Wegmann quotes. According to him residential typology, in Montréal, defines a building type by the number of units in one building over one plot and the dwelling’s type of access to the street. The three main groups are single-family houses, Superposed Flats of the Plex type and apartment buildings. The flats group could be subdivided into five main sub-groups: duplex, triplex, fourplex, fiveplex and sixplex. Superposed flats in Montréal, known as ‘Plexes’, usually provide for each dwelling to have an individual door opening directly to the street and another to the court-yard. The apartment building or tenements are defined by the number of dwellings, usually above eight units, where each dwelling is connected to the exterior through a communal entrance, hall and staircase leading to the street. Of course it should be added that apartment buildings do not offer living units that stretch from the front to the back of the building, offering front and rear access points, usually private or at most shared with a neighbouring flat. Based on their geographical location, Superposed Flats have been known by different terms in different cities. In Boston, they are known as simply “Deckers”, in Chicago as “Flats” and in Montréal they are called “Plexes” (Figures 2.1, 2.2 and 2.3). The Superposed Flats of Montréal define the landscape of the city and have contributed in great part to its architectural, cultural and social milieu. Montréal’s Superposed Flats are referred to by Hanna (1986) as multiple-dwelling houses with a prefix signifying the number of flats, including mainly the duplex and the triplex but also variants such as the three-Plex, four-Plex, five-Plex, six-Plex and eight-Plex. Montréal’s residential typology in the context of the Plex family of Superposed Flats is addressed in detail in Appendix A.



Figure 2.1 Model of Chicago "Three-Flat"⁶



Figure 2.2 Model of Boston "Three-Decker"⁷

⁶ Typically featuring one common door, a vestibule and two inside doors, one leading to an inside staircase to the upper flats, Retrieved from http://www.dean-team.com/blogs/deans_team/archive/2007/10/16/e965fd02c80f4bb29557fd6487b5dbdd.aspx

⁷ Typically featuring one door, a vestibule and two inside doors, one leading to an inside staircase to the upper flats, Retrieved from <http://www.historicnewengland.org/about-us/press-media/news-releases/expired-releases/the-triple-decker>



Figure 2.3 Model of Montréal "Triplex"⁸

The research contained in this thesis aims to explore the sense of place and patterns of place attachment within Montréal's Superposed Flats environment. These perspectives of 'human-place relationships' are specific attributes of the old established duplex and triplex neighbourhoods of Verdun. Furthermore, we will investigate the English-speaking young adult residents' reasons for choosing to live in this environment. This chapter will present the primary theoretical basis of the research problem.

We begin with a review of the literature rendering the origin of Plexes with respect to a description of Montréal's duplex and triplex buildings. Once the notion of Plex in the variation of duplex and triplex has been defined we will discuss the Plex environment on different levels in the residential and neighbourhood context.

⁸ Typically featuring both outside and inside staircases with three private entrances, one per flat, Retrieved from <http://www.viacapitaledumont-royal.com>

An overview of how urban scholars and social scientists have understood the Plex milieu and its social life will enable us to identify why it is important to look at these old established neighbourhoods of Montréal in terms of the kind of lifestyle that they offer to their residents as well as the possibility and the intensity of a sense of place and place attachment that they have promoted for their English-speaking young adults.

2.1 An overview of the origin and the historical evolution of Plexes

From 1850 onward, Montréal began a new phase in its history and was transformed into the largest industrial metropolis of Canada. At the time, a huge number of homes had to be built in order to accommodate the large rural families who were attracted by the employment opportunities of the city as well as the children of established Montréalers, who owned dwellers of their own homes. This is when Plex housing started literally to shape countless residential streets in the city and in most of the city's surrounding suburbs, in almost every neighbourhood. Although historical studies reflect a limited geographical spread of Plex housing across Canada, the Plex tradition never ceased to be built throughout the province of Québec, even in smaller cities like Sherbrooke, Trois-Rivières and Chicoutimi (Linteau, 2007; Hanna and Dufaux, 2002; Marsan, 1990). By the first quarter of the twentieth century, Plex housing became so common that for most Montréalers, especially those who lived in the large francophone areas, "a flat in a three-storey block was a home" (Marsan, 1990:275).

It was Warner (1968) who suggested that the Plex tradition was imported to Québec via the Boston three-deckers. However, Hanna (1986) dismisses this theory and postulates that for Boston the majority of Canadian immigrants were from the

Maritime provinces where the Superposed Flat tradition was not an identifiable trend, while Montréal's migrants came not from the maritimes nor Boston but rather from rural Québec and Europe. Furthermore, Boston's three-deckers seem to have arisen too late in the century to inspire Montréal's Plex tradition. The early 1870s is identified as the period for the rise of Boston three-deckers (Wegmann, 2006), while the 1860s is indicated as Montréal's Plex arrival date (Hanna, 1986). However, Hanna and Dufaux (2002) push the Montréal Plex back much earlier than that, more likely into the 18th century. The architectural differences of these two traditions are remarkable, too. Montréal Plexes usually have multiple entrances, brick-faced wooden plank walls and British, Italianate or French second empire detailing. Then, of course there are the iconic outside staircase, balconies and galleries unique to Montréal.

Three-deckers instead, are wooden buildings usually with one entrance and American ways of styling with a touch of Greek influence, Colonial revival, and other very American styles. On these grounds Hanna, (1986) refers to the origins of Montréal Plexes as the "Tyneside flat," (Figure 2.4), a traditional English row-house form, without any stylistic flourishes but a low-angle gable roof. According to Hanna (1986), a railroad bridge project with a landing point at Pointe-Saint-Charles in Montréal was built by the Grand Trunk Railway to cross the St. Lawrence River. A Newcastle based project management firm came to Montréal to supervise the project and built 24 units of workers' housing in the form of "two over two" fourplexes known as 'Sebastopol Row' in 1857. This low-cost and reasonably dense model met the highly demanding housing market of Montréal and immediately influenced the local builders. Still, this is but one of many presumed influences as Hanna and Dufaux (2002) demonstrate, showing deep 17th century French roots and very significant 19th century Scottish roots.

In the early 19th century the French rural model began to be split into two living units one per floor (Figure 2.5). Then a steep staircase along the side of the house providing direct access to the unit on the second floor was added in order to more easily facilitate access and make architectural plans and construction more simple.

This is what could be referred to as a “marriage of convenience” between the French and Scottish traditions which combined the French-Canadian outdoor staircases with the Scottish way of stacking one flat on top of another (DeWolf, 2007).



Figure 2.4 Newcastle, England, Tyneside flats type (duplex row),
Retrieved from <http://www.sarahglynn.net>



Figure 2.5 The vernacular rural Québec with one living unit on each floor, Retrieved from <http://buildingwatch.blogspot.com.tr>

2.2 The Typical Duplex and Triplex building: A description

Montréal Plexes, following the fire preventing bylaw of 1851, were historically faced in masonry or stone, and used the wooden plank-wall system, a heritage of the ancient French “*pièce à pièce*” construction method (Hanna, 1986). Using this method, the huge boards are laid edge-on-edge to ensure a solid structure with openings kept for the doors and windows. In the Montréal Plexes there is a significant emphasis on providing each unit with its own entrance via a door on the front façade, sometimes shared between two flats. Montréal duplexes are described as early 19th century, two-storey buildings with one flat situated on top of the other, which were repeated in enormous rows throughout Montréal’s working class neighbourhoods, and became the template for residential multi-family housing at the time. Basically, each flat extended from the front of the building all the way to the back, with a direct connection to the street and to the rear of the lot. The duplex house type later

generated the triplex forms in 1870 with several variations (Hanna, 1986). It was a form that met the accommodation needs of a growing tenant population who had low to moderate incomes.

Montréal's building code regulations, which were designed to improve the living conditions of the residents, had a significant role in reinforcing the dominance of the Plex tradition in the city and its suburbs. According to this regulation, it was dictated that the wood-frame buildings must be covered in masonry or pressed bricks and each flat was obliged to have its own bathroom. This was really revolutionary at the time when backyard latrines were still the norm in many old neighbourhoods.



Figure 2.6 A typical Montréal Duplex⁹

⁹ With two private doors for access, the upper unit reached via an outside staircase. Retrieved from: <http://www.alamy.com/stock-photo-villeray-area-montreal>

In addition, laneways were built in between the blocks to service the flats on either side of the adjoining streets. Authorizing setbacks on newly built residential streets indirectly encouraged the further use and construction of outdoor staircases as a space-saving measure. Changing the regulations on specific building elevation codes generated L-shaped buildings that allowed natural daylight to enter into every room of the dwelling. All these regulations created an official template for the Plex that enabled the contractors to quickly and cheaply build high-quality housing (Wegmann, 2006).

Hanna (1986) documented a number of other influences on the Plex's style of architecture. One was the British-inspired terrace housing, with a lane running behind the lots, which was applied to the duplexes of working-class neighbourhoods, and the evolving triplex model. The American flat roof technology is another effect that was quickly adopted by Montréal Plex builders in the 1850s. The popularity of the American flat roof refers to its cost saving, space-maximizing attributes and its capacity to respond to the heavy snowfall and winter icicles of Montréal. Although, there are some regional variations in Montréal's Plex buildings, their layout remained fundamentally similar from one neighbourhood to the next. However, on some prestigious streets of the city and suburbs such as Westmount, Outremont and NDG, the middle-class presentation of Plex buildings did not allow for outside staircases. These groups of buildings were semi-detached Plexes without outdoor staircases, which seem quite similar in style to single-family homes (DeWolf, 2007). Oftentimes the door to the upper flat was hidden on the side so as to further hide the Plex typology from passersby.

Triplexes are usually, though not always, row house flats with no space between adjacent structures. They are generally 25' to 30' in width, and occupy the entire

width of the lot. Although, some triplexes have shared entrance lobbies, typically a metal or wood external staircase provides access to the second floor followed by a private staircase within the building that rises to the third-floor unit. While Montréal has a harsh winter climate, the Plexes' external staircases are so common that they have become a symbol of vernacular architecture in the city (Wegmann, 2006).

Whatever their form, one common element among Montréal Plexes has always been their unique ownership structure. Often, the owner lives on the ground floor, renting out the other flats to help pay for the mortgage for the entire dwelling. In the early 20th century as DeWolf (2007) notes, often an entire immigrant family would live on one floor and then in time, their kids would grow up and they would live on the upper flats. Prior to advertising a sale, the Plex' owner would approach the tenants offering them an opportunity of home ownership.



Figure 2.7 A typical triplex with external staircase and multiple doors, Retrieved from <http://www.themainmtl.com/2014/05/history-lesson-external-stairs>

In the 1940s and 1950s, the triplex tradition was mostly abandoned in favor of small detached single-family houses, small apartment buildings and duplexes in semi-detached formats. Later still, by the 1980s, "Condoplexes" emerged in mostly sixplex and eight-plex varieties together with outdoor staircases of the traditional Plexes, combining these layouts with the contemporary Post-Modern architecture within individually owned units.

This research is concerned only with the traditional duplex and triplex buildings; therefore, we will not trace and track the regenerated form of Condo-Plexes and their layouts. Instead, we will pay particular attention to the social fabric of old established Plex neighbourhoods and the social life of their residents. There is limited empirical documentation and research on the Plex physical and social life, with the exception of Hanna's (1986; 2002) landmark contributions on the conceptualization of the Plex buildings. In the next section, we will address some highlights of living in a Plex building both as a home and in the context of a neighbourhood.

2.3 Plex housing as a home and a neighbourhood environment

The meaning of a dwelling, sometimes referred to as a meaning of home, has been studied from many different perspectives particularly within the disciplines of philosophy, sociology, geography and psychology together with environment-behavior studies. The Western conception of 'home' often more emphasizes the physical structure of a dwelling, where space and time are controlled and structured functionally, economically, aesthetically and morally. As such, the actual home acts as an individual source of personal identity and status, offering domestic security and providing a sense of place and belonging in an increasingly alienating world.

Furthermore, most of the literature in the Western context has studied 'home' in relation to family as a white, middle class, heterosexual nuclear family which materially and symbolically represents particular gendered roles and relationships. We have to bear in mind that the latter is no longer the sole household form in the contemporary Western societies where other household forms might be equally pertinent to the constitution of the home. Likewise, the significance of the relationship between home and family can be changed over the course of an individual life or in different spatial contexts (Coolen, 2004; Mallett, 2004; Altman, 1992; Poyatos, 1988; Saunders & Williams, 1988; McCarthy & Saegert, 1978).¹⁰

In Montréal, the Plex housing phenomena is deeply thought of as the core form of vernacular architecture that creates identity and the image of the city (Hanna, 1986; Hanna and Dufaux, 2002; Marsan, 1990). However, both in the context of home and neighbourhood it is much less examined than Montréal's single-family houses and apartment buildings. Instead, smaller locally born builders have transmitted much of the Plex architectural culture, style and knowledge in a non-written manner through apprenticeship or on-the-job training. In this research, we aim to discover how English-speaking young adults approach, experience and perhaps appreciate the Plex as a 'home'. We are also eager to explore the attached and evoked 'sense of place' in the Plex environment and the ways in which these old established places are re-shaped and used by another generation of residents.¹¹

¹⁰ It is important to distinguish between house, home and household. Home is pictured as a locale, through which basic forms of social relations are constituted and reproduced. The physical aspects of home, including its location, design and size are referred as a house that could enable or constrain different relationships and patterns of action for its residents. The social units of home are introduced as its households, which is the core domestic unit of the society (Saunders et Williams, 1988).

¹¹ Having note that, wide-ranging household types should not be misinterpreted with the family as a kinship group. Gender and age together with factors such as residential location, class, ethnicity and housing tenure also, explain some of the variations in the meaning of home that exist between households (Saunders et Williams, 1988).

The everyday meanings of the Plex architectural environment and the way that residents respond to it have been significantly neglected in most of the related literature. This vagueness makes it more pertinent to study Plex buildings as a complex product, ranging from not only a historic physical space in which people live, but also a space where special forms of social interactions take place. Consequently, the sense of place, the perceptual meanings and the attachment of such an environment have to be studied in relation to the fixed features (Plex' architecture and structural elements), semi-fixed features (renovated parts or furnishings) and non-fixed features (activities and behaviors of the residents in Plex environment) (Poyatos, 1988). In this thesis we will address the fixed features of the traditional Plex buildings (e.g. outside stairways, balconies, galleries) in relation to their social and cultural meanings rather than to those of the individual. Semi-fixed features will be discussed as a factor, rich in personal meanings that often remind family and friends of the occupants while imprinting their own personal identity onto the place. The non-fixed-featured elements will be seen in relation to activities that take place in a dwelling and communicate the occupiers' social identity and status.

Moving from the concept of home as a personalized residential unit to the larger scale of a neighbourhood, we will take note of the excessive amount of social encounters within the content of high-density residential buildings existing within many neighbourhoods in the urban confines of biggest cities. Such an experience identified and labeled as "social overloading" characterizes the unpredictable and uncontrollable experiences of social interactions in high-density neighbourhoods (McCarthy & Saegert, 1978). This 'social overloading' helps to explain the increasing number of people with whom one must have to deal with on a daily basis and an overload of personal experiences on people' behavior. Comparing the high-rise buildings to the low-rise apartments, the authors notice that high-rise buildings residents mostly express the reactive feelings of territorial defensiveness and belongingness, in

contrast with those in the low-rise apartments who describe the sense of belonging to their residential units and their social involvements. Compared to the low-rise apartments, residents of high-rise buildings do not perceive their environment as one in which they strengthen their sense of security. Although, they may make some distinction between people on their own floor and the rest of the building, the high-rise residents generally do not express much willingness to take responsibility for other neighbours or to get personally involved in social contacts with them.

The relationship between the physical arrangement of a place and the process of friendship development has been addressed by Kusenbach (2008) who suggests that having a level of familiarity with others is grounded in frequent passive contacts. Accordingly, the building blocks that offer these kinds of contacts are witness to an elaboration of closer social ties between dwellers. As an example, the author refers to the U-shaped architectural forms around a central courtyard, in addition to the building layouts such as central access or shared facilities that may increase the opportunity for passive contacts among residents.

In our study, we noticed that in the Plex environment, the doorsteps, the galleries, back yards, outside stairs and balconies all provide communal spaces oftentimes within close view and earshot of other neighbours. These spaces are the horizontal and vertical means of communication for those who live in Plex environments that result in a high visibility of the private and semi-private lives of Plex dwellers. Among all of these communal spaces, the role of balconies in offering unplanned encounters and informal social interaction seems to be most significant.

The typical front balconies serve as a natural extension of the Plex units in which residents' everyday life is actually played out. Residents install their radios and television sets outside and often bring their armchairs, sofas, herbs, flowers or entire

vegetable gardens outside on the upper floors above busy city streets (Probyn, 1996). Having their own territory, for people who use these balconies during the summer time, engenders a greater feeling of a proximity to neighbours thus creating the greater possibility of friendships.

In addition to the unplanned encounters and informal social interactions that the Plex environments offer, there is a question of residential proximity and the strengthened sense of security germane to this style of housing. To sum up, the duplex and triplex attached housing in ethnic areas of Montréal are oftentimes referred to as an example of the style of privileged older inner-city neighbourhood, which are efficient and well organized in the context of security.

Plexes' specific features such as outside staircases and balconies provide a non-isolating environment which succeeds in developing locally based friendship networks in addition to establishing visual control over the space that may result in more residential satisfaction, especially for women and parents who have children (Probyn, 1996; Rose, 1984).

The notion of security in Plex neighbourhoods is an important factor, which directly relates to the residential proximity offered by these types of buildings. The given proximity in a Plex environment is a direct result of living in different flats under the same roof, in addition to the features like front and back balconies, porches and staircases, tiny front yards, backyards and the multiple windows of Plex buildings. The casual interaction amongst neighbours that is formed through these features, contribute to bringing people to develop relationships with what goes on in the street and with the surrounding neighbours. While Plex residents may not even be consciously aware of their involvement in such a process, this proximity does improve the sense of security and neighbourliness and enriches the individual and

collective sense of place in Plex neighbourhoods. The “eyes on the street”¹² in Plex-lined streets, suggests an evident role in reducing street crimes and offering a greater level of security (DeWolf, 2006, 2007; De La Riva, 2000).

The Plex environment offers a fair degree of security, as there always seems to be a constant flow of people coming or going with neighbours oftentimes stopping for chitchat. Beside the sense of security that may be offered within Plex environments, the intermediate spaces of Plex buildings such as balconies and stairs may help people to develop their ‘sense of belonging’ to a wider context of living space.

The human-scale streetscape, shaped by Plex-lined streets, is a pedestrian-friendly form that seemingly transforms the street into a room, not just a passageway. Over and above these qualities, the high level of tenant occupancy in the low-rent market of Plex neighbourhoods offers a degree of freedom to households oftentimes under a severe budget constraint (Gilliland, 1998). Having discussed the broad positive aspects of Plex buildings as an important component of the present housing stock of Montréal, the Plex architectural form is open to a certain degree of criticism for its outside staircase and balconies, which are ill suited to the hard winters of Montréal. These appendices get heavily covered in Montréal’s severe winter, resembling nothing more than icy water slides, which pose threats to the safety of residents that seemingly make absolutely no sense (Probyn, 1996; Marsan, 1990).

¹² In her remarkable contribution to urban literature, “The Death and Life of Great American Cities”, Jane Jacobs (1961) outlines safety, particularly for women and children as a basic factor of neighbourhood livability. In addition to a dense population, mixed uses, short blocks and narrow street-lines, which encourage different kinds of people to walk around at all times of day, she coined the term “eyes on the street” that involves residents’ surveillance of public space and provides a ‘sense of community’ while discouraging street crime in urban blocks.

"However, as soon as the spring sun emerges, balconies, staircases and front gardens become the places where personal and neighbourhood life is conducted"(Probyn, 1996 :3).

Icy staircases are then either forgotten or forgiven. These places become venues for that spring ritual of spontaneous social communications from one staircase to another and from one balcony to the next encouraging the dense, vibrant street life that blooms in the Plex urban fabric.

2.4 What to study in the Plex urban fabric and why?

Given all of the seeming advantages of Plex buildings, both from the standpoint of creating an attractive urban landscape, livable neighbourhoods, unique architectural forms, as well as a low-cost affordable housing type, there is a striking lack of study or analysis of this type of housing. Likewise, the Plex lifestyle and the adaptation of residents to the particular culture generated by Plex buildings have not been sufficiently studied. There do not appear to be any significant or comprehensive studies on the English-speaking population of residents of these old-established statistically traditional Francophone neighbourhoods of Montréal. The pertinent question then suggests how the newly appearing English-speaking residents of these traditional neighbourhoods relate to such architectural forms. How do they adapt to the residential proximity and social encounters of these milieus and what is the 'sense of place' for these groups of residents? In this research, the specific architectural form of Plex housing and the type of social interactions they may offer will be studied in a bid to understand how young adults experience life in such a context. Analyzing the dual relation of these traditional Plex neighbourhoods with the younger residents' aspirations and perceptions, together with their modern lifestyles, is the ultimate goal of this research. The methodological strategy to tease out of these questions will be outlined once this thesis has dealt with the fundamental conceptual framework in the

next two chapters, followed by the actual research proposition. In Chapter three, we will track the patterns of intra-urban residential mobility and the related decision-making process, human needs and motivations theories, as well as the notion of residential satisfaction. Chapter three will later help to create a better understanding of why young adult residents move to Plex buildings and how they chose to reside in those neighbourhoods.

To have a better understanding of the patterns of peoples' perceptions and interactions according to their residential places, it is important to define the term 'environment'. The most common use of the term 'environment' refers to the biological surroundings of people. However, the environment of people consists of their whole surroundings, natural and artificial, which together are the major determinants in asserting one's quality of life. By this means, the built environment suggests having four interlocking components. These are the terrestrial, the animate, the social and the cultural ones (Lang, 1994). The 'terrestrial environment' refers to the nature of the structure and the physical settings of the built environment. The 'animate environment' refers to those who occupy the built milieu. The 'social environment' suggests the relationships among people while the 'cultural environment' indicates the broader behavioural norms of a society and the atmosphere created by it. However, the distinction between the social and the cultural environment is a blurred one and it is suggested to consider them as one multi-faceted environment (Lang, 1994). In this thesis, to explore phenomena which relate to the Plex environment, we consider the physically built structure, the inhabitants and the social milieu of the place together as a whole.

CHAPTER III

WHO LIVES WHERE AND WHY - RESIDENTIAL MOBILITY, SATISFACTION AND HUMAN NEEDS

3.1 Residential mobility

The movement of residents within urban areas, defined as 'residential mobility' or 'intra-urban migration', is the predominant form of population movement in the developed world. Residential mobility serves, as well, as a major factor in the changing socio-economic and spatial structure of urban areas. The residential mobility process and its relationship to the changes in the socio-economic characteristics of urban neighbourhoods have long been the subject of discussions amongst sociologists and human geographers (Day, 2000; Gilliland, 1998; Temkin & Rohe, 1996; Cadwallader, 1992; Gober, 1992; Rossi, 1980; Short, 1978; Hoyt, 1939; Park & Burgess, 1925). Such widespread attention demonstrates the importance of a deep understanding of the population distribution and the way it changes the pattern of housing demands within the context of the whole of the city.

Along with discussions on the direct relationship between population and housing, the actual number and the composition of the households have to be a matter of study and interest. According to Gober (1992) a household is most often referred to as a group of individuals who are sharing a dwelling unit. The patterns of household aggregation and their characteristics reflect the ways in which a society uses its housing stock. As well, the composition of households illustrates the changes in cultural values and lifestyle traditions. The distribution of different types of

households and the unequal opportunities for mobility lead to develop unequal rates and types of population change that affect different places of the city in different fashions (Gober,1992).

A major part of the literature concerning the residential mobility approach relates to life stages, which individuals are traversing while relating to the cultural norms of home ownership and family-based housing spaces. This body of literature shows that changes in the life-cycle stage may result in the increasing demand for the quantity of space. One of the most frequent classically cited authors in the residential mobility literature is Rossi (1980), from whom almost all intra-urban mobility studies flow. His study depends heavily on the concept of the family life cycle in the interpretation of residential mobility. For him, the major function of mobility is the process by which families adjust their housing needs to the shifts in family composition and life cycle changes.

“Families change as they go through a life cycle of growth and decline. Housing needs change rapidly in [the] early years as space requirements quickly grow and as the family at the same time becomes more sensitive to the social and physical environment provided by the location of its dwelling” (Rossi, 1980:178).

Despite some classic studies (E. W. Burgess, 1925; Hoyt, 1939) which suggest the overall direction of movement as being outwards towards the suburbs, (Rossi, 1980) considers that all residential moves are associated with the life-cycle changes. However, this theory is criticized in the case of many smaller cities where the housing stock may not be as spatially differentiated as the model suggests. Moreover, the life-cycle model is more related to middle-income residents in the private housing market. For those residents in public housing and for those with restricted housing choices, as well as with racial or income discrimination, the proposed life-cycle model is not substantially relevant.

Most of the research related to residential mobility as a housing adjustment process has followed Rossi's theory and has been confined to the view of changing family composition as being directly responsible for the changes in housing needs.

“The young couple usually starts married life in an apartment, moves to a small house as children begin to appear, shifts to a larger home in the suburbs as the family reaches maximum size, and returns to small residential quarters, often in the central city, when the children leave to establish homes of their own” (Hawley, 1971: 180-181).

Based on what Hawley (1971) argues, at a specific point of the life cycle, the children leave and consequently, the requirement for space decreases. Such a decrease may also continue when one spouse dies and the other one moves to a retirement home (Winstanley, Thorns, & Perkins, 2002). Having made the decision to move, the household searches for a new dwelling unit using both formal and informal information channels, and chooses a new home based on desired characteristics as determined by the household (Quigley & Weinberg, 1977). Besides such a widespread agreement on the concept of family life cycle as being the most important determinant of intra-urban mobility, the definition and measurement of that cycle is still a matter of concern and further study.

The life cycle model proposes that people pass through a predetermined order of stages including pre-marriage, marriage, childbearing, adult children leaving the parental home and widowhood. However, Gober (1992) states that not all changes in residence are life cycle induced. She claims that people divorce, cohabit and move into and out of households as economic need and social circumstances dictate. The residential mobility in such a context may or may not occur in conjunction with shifts in family life cycle. She advocates the notion of a ‘life course’, as a more appropriate and descriptive term instead of the ‘family life cycle’ as an organizational

framework relating to socio-demographic change in the city (Gober, 1992). Being close to selecting the actual 'life course model' refers to the pathways that individuals follow throughout their live and incorporates the multitude of roles that individuals experience. Such experiences will be seen with respect to education, work, marriage and parenthood alongside their social life and residential choices. In this model, housing choice becomes one variable amongst several interwoven life pathways.

This 'life course' model is more centered on the points at which renters become homeowners. It also considers the possibility of backward moves in the housing career and the possibility of a non-center relationship between employment and housing careers. Since the life course model may be harder to measure and comprehend, the life cycle model may be more popular for scholars because of its well-defined stages. Still, the life course model is more capable of answering the important questions of residential mobility within the context of diversity in following housing careers, lifestyle choices and socioeconomic patterns.

The formulation of the residential mobility process according to Rossi (1980) concentrates predominantly on adjustment to changes. However, Speare (1974) proposes a more elaborate theoretical description for residential mobility patterns. He places much emphasis on the adjustment to change to dissatisfaction through incorporated changes in household needs or in locational amenities. As he states:

"Mobility is a result of an ongoing three stage decision-making process. First, there is a development of a desire to consider moving, second, the selection of an alternate location and finally the decision to move or to stay" (Speare, 1974: 175).

Speare (1974) suggests a model for the first stage of mobility decision-making, what explains the determinants, which cause people to consider moving. Factors such as

age, income and duration of residence, are not seen to directly affect the decision to consider moving. Instead, the decision-making process is more involved with the household's level of satisfaction. Residential satisfaction in this model assumes dependence on household characteristics and aspirations, housing unit and locational characteristics and the household's social bonds with neighbours and the neighbourhood. Compared to the older groups of residents, the younger population may consider moving more often. However, it cannot be assumed that growing older will cause immobility.

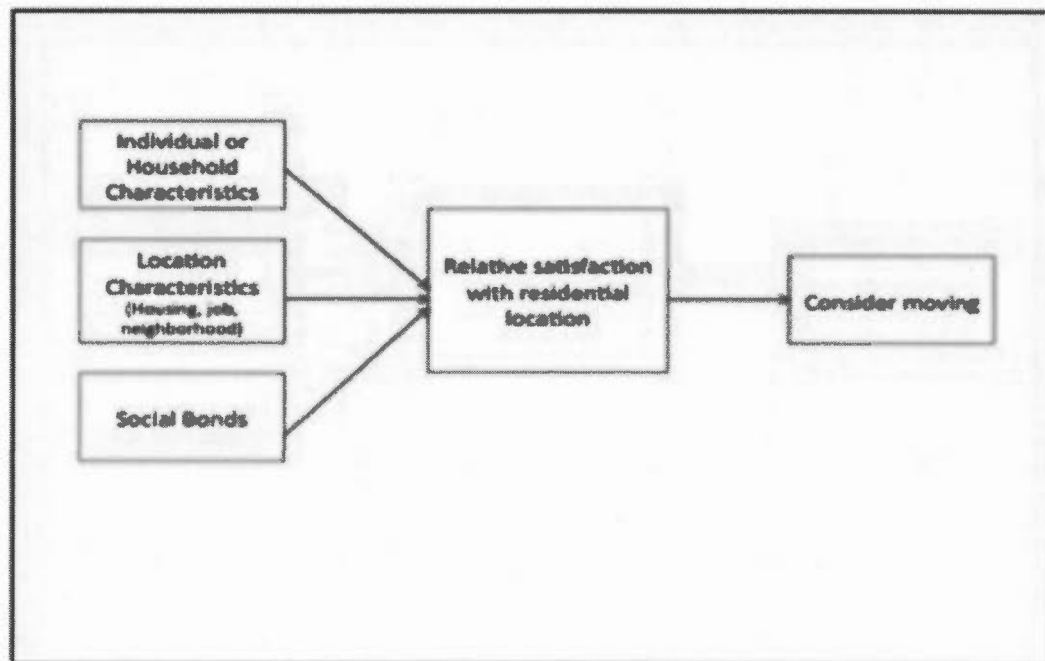


Figure 3.1 The Speare (1974) model for the first stage of mobility decision-making

In the second stage of the residential mobility decision-making process, Speare (1974) demonstrates that searching for an alternate dwelling unit will be restricted to areas in which the household has some degree of familiarity. Once the alternate residential dwellings have been evaluated, the decision to relocate will be based on the intensity of dissatisfaction experienced in the current residential location, in

addition to the expected degree of satisfaction with the alternate residential location, as well as the costs of moving. Since social bonds take time to build, the longer that people reside in an area, the more social contacts they are likely to have. Similarly, satisfaction with accessibility to commercial shopping areas and other local facilities and services is likely to increase the degree of satisfaction and happiness, relative to the more chances that people gain positive familiarity with an area.

In the context of voluntary mobility and the classification of the reasons for moving, we need to distinguish between what are referred to as 'adjustment moves' and 'induced moves' (Cadwallader, 1992). Adjustment moves are related to the dissatisfaction with various attributes of the housing unit or environment, such as the unit's size, quality of the space, neighbourhood location and accessibility to services. Space considerations are consistent predictors of the tendency to move, which are mostly associated with the different stages of the aforementioned life cycle. Induced moves, on the other hand, are related to specific events in a residents' life, such as a sudden change in marital status, retirement, eviction, job transfers or the elimination of their housing unit. Excluding these induced moves, mobility may be viewed as resulting from the increase in the resident's dissatisfaction. This might be from a change in the needs of residents, a change in the social and physical amenities offered by a particular location, or a change in the standards used to evaluate these factors. A change in standards could be a result of social mobility, aspirations or the acknowledgment of information about opportunities elsewhere. Cadwallader (1992) concerns about one's socio-economic status as well as familial needs in the collective process of choosing a residential location. He argues that it is the person's life cycle stage and socio-economic status which are the primarily overwhelming influence in a residential choice. Nevertheless, mobility is a very real and accepted response to the dissatisfaction with one's household, the degree of which could be reduced by implementing other changes to their current residential circumstances.

As the mobility literature evolved in the 1970s, there was an increasing understanding of the role of the individual decision making process in influencing patterns of residential mobility. For example, Lu (1998a) strongly emphasizes the factors of size, type, price, tenure of the new dwelling and its location as being critical to the mobility decision-making process.

The study by Brown & Moore (1970) is another classic work that effectively divides the mobility process into two stages. In the first stage, people become dissatisfied with their present housing situation once critical changes occur in the household environment or its composition. Stress arises in their present housing situation and eventually leads the household to the second stage, which might be the decision either to relocate or to stay in the present dwelling. If no better alternative has been found in the housing market, the occupants may adjust their needs or restructure the present dwelling so that it better satisfies their needs. This study outlines the most important criteria in defining residential aspiration as to the cost, dwelling characteristics, location, quality of the physical environment and the social status of the neighbourhood. However, Short (1978) is not in agreement with this theory and argues that these factors are not equally important for all residents. He notes that those with restricted housing opportunities may have to take what is available, in contrast to those with more effective choices to maximize their desire for specific dwelling types.

The residential mobility model of Brown & Moore (1970) stops at the point of choosing a specific dwelling. Yet, Kennedy (1975) argues that residential mobility is a continual process. In such a process residents do not stay in one dwelling forever and there are post-move stages in each residential mobility pattern. At first, residents might have reflections on the previous image of the new dwelling, which may or may not coincide with their actual experience there. Then there will be an evaluation of the

experiences in the new dwelling in terms of opportunities and constraints, as compared to the former one. This stage may either bring residential satisfaction and a decision to stay or dissatisfaction and an attempt to move again. However, not all mobility decisions evolve with the development of residential dissatisfaction proceeding to the point where one considers and plans to move.

The concept of residential mobility has been widely discussed in terms of the gentrification process, which poses a major challenge to the traditional theories of residential mobility and urban social structure (Brown-Saracino, 2013; Ascher, 2010; Lees et al., 2010; Freeman, 2005; Atkinson, 2004a; Rose, 2004; Bondi, 1991; Hamnett, 1991; Beauregard, 1990; Rose, 1984).

Most of the classic authors in the field, define a neighbourhood's changes as a one-way process in which the affluent rarely move backwards into the obsolete housing that they had previously given up (E. W. Burgess, 1925; Hoyt, 1939). However, the gentrification process could be seen as a reversal of such unidirectional downward movement of lower income groups moving into progressively deteriorated housing. During the gentrification process, the higher income residents move into the inner city, buy or rent houses previously occupied by lower-income groups, effectively displacing them. Such a process provides graphic evidence of the connections between production and consumption on one hand and the economy and culture on the other.

On the other hand, Beauregard (1990) believes that the process of residential change has other potential outcomes for the neighbourhood, ranging from gentrification to total abandonment of a neighbourhood. It means that the decline and devaluation in a neighbourhood may or may not result in gentrification. His work refers to a number of working-class neighbourhoods where housing was well maintained for decades.

In these neighbourhoods the working class families move in and out, replacing each other with the same or different ethnicities. Yet, a neighbourhood does not necessarily have to have been deteriorated before being gentrified.

During the gentrification process, the residents move when there is a discrepancy between their current housing needs and their current housing occupancy. Housing prices as well as the prices for services and goods in the neighbourhood, will accordingly rise especially for owner-occupied housing. Yet, needs of the local residents in gentrified neighbourhoods are better addressed so that they are more satisfied with the evolution of their environment. In such a context, the increase in rents force lower-income groups to depart towards the older suburbs (Ascher, 2010).

The gentrification process results in considerable movements of human resources and financial investments, which in some situations could change the representations of the urban form and bring a greater revitalization to central city neighbourhoods, even though it will cause an involuntary displacement of low-income renters (Freeman, 2005). Yet, the process of moving is costly in terms of time, money and daily routines, and residents may try to adjust to be more sensitive to their changing neighbourhood characteristics in order to forego involuntary displacement. Changing a housing condition may actually be considered as a factor that draws people into a neighbourhood. Likewise, a better representation image of a neighbourhood promotes consideration for local people to stay while it may attract outsiders to move in to the gentrified neighbourhood.

Beauregard (1990) is one of the often most cited authors concerning the studying of the “gentrifiers”, who are known as those spending their life savings to own and renovate a deteriorated and undesirable residence and consequently neighbourhoods, making them into a better place for a variety of people from different backgrounds and cultural groups.

The common prototype of this group is a single-person or two-person household comprised of middle-class professionals without children. Beauregard (1990) discusses the reasons that these professionals do remain within the city and get engaged in the gentrification process. According to him, gentrifiers desire to live in inner-city neighbourhoods close to their jobs where they can establish an urban lifestyle and live in a place that reflects their choices, personal tastes, and values. Arising from this theme is one of the main aspects of gentrification involving the gentrifiers' attitude and behavior. Beauregard (1990) argues that over the last few decades the postponements of marriage and of childbearing, as well as a decision to remain childless, has created more single individual households and childless couples whose consumption needs differ from those who have traditionally migrated to the suburbs. These urban professional groups are seeking social opportunities beyond their workplace in order to meet others in the same or similar group and develop social relations and friendships. While suburban zoning tends to be more spatially integrated with traditional nuclear families who have children, the latter middle-class urban professional groups mostly seem to prefer to keep to certain areas of the city where there is greater potential for social contact and opportunities for commercial consumption.

The majority of the existing literature about gentrification suggests that women have an important role both in demand for gentrified housing and the displacement process, as a result of adverse gentrification. Such a presence on both sides of the gentrification process could be explained as a result of changes in the position of women in the family and in the paid labor force. Yet, there is not much attempt to locate the role of women in the gentrification process within the broader discussions of gender relations. Citing the works of Beauregard (1990) and Rose (1984) there is a strong argument by (Bondi, 1991) on the growth of women's professional occupation and its key role for their entry into a new group of middle-class gentrifiers. She places

specific emphasis on the increased number of independent women living alone, the increased rate of divorce, and the rising average age of marriage. As she notes, these factors contribute to an increase in the total demand for housing units among young or elderly single women who often prefer to move into gentrifying areas. These trends combined with the increasing number of successful middle-class women who obtain well-paid career jobs, all contribute to forming affluent female households. These groups of women can afford the house of their choice and become involved in the gentrification process in different ways. She also has concerns about women as a prominent group among the economically weakest sectors of the urban population who are the most vulnerable to displacement. Gentrification based on Bondi's (1991) illustration is a profit-making process and 'lifestyle choice' at the same time. Still such profit-making for some seems as a form of impoverishment for others, while the 'lifestyle choices' of some may deny those of others as well.

Having said that, the movement of gentrified residents into the low-income areas has been criticized in much of the contemporary literature. For example, Atkinson (2004a) is one of those who has expressed particular concerns about the possible social segregation and the social polarization due to the gentrification process. As he explains, the movement of gentrified residents into low-income areas, with new lifestyles and attitudes, could create overwhelmingly negative effects such as significant displacement of low-income groups from gentrified neighbourhoods.

Rose (1984) has produced works that looks specifically into the lifestyles and gender related aspects of the gentrification process. She defines the lifestyle as:

“The pattern of behavior which conforms to the individual's orientation toward the three major roles of a household member, a worker and a consumer of leisure which conforms to the constrained resources available” (Rose, 1984: 201).

Concerning "alternate lifestyles" which are often more readily evident and identified in inner-city neighbourhoods, Rose (1984) states that in-movers are often attracted by low prices of gentrifying neighbourhoods and a certain tolerance of unconventional lifestyles. Yet all in-moving homeowners most often have more in common with one another's class and lifestyle than they do with any of the previous groups of inhabitants. Besides the two-partner nuclear families, the author considers gentrification as an attractive option for single parents, gay couples and unrelated people living together, who are still to some extent socially excluded from suburban communities because they do not meet the norms of the nuclear family in such neighbourhoods.

The vast body of literature still emphasizes the traditional family-developmental framework and assumes that most individuals proceed through the identifiable stages of education, work, marriage, children and retirement. However, different roles and options may present themselves throughout different stages of adulthood for different individuals. Individuals may make different choices at different points in their lives. These alternate lifestyles that are addressed by Rose (1984) are explained in detail in Macklin's (1980) research on family structure of North American cities. According to the author, the late 1970s witnessed a decline in familism and the growth in individualism with more power for people to determine the course of their own lives. While traditional families still formed the larger part of society, the increasing population of those involving non-traditional forms with alternate lifestyles has to be considered. The non-marital cohabitation is mostly perceived as not lasting as long and those who are living as unmarried couples and are still a smaller proportion of the whole household population, except perhaps in Québec.

On the other hand, Macklin (1980) questions voluntary childlessness and the deliberate decision of husbands and wives to forego parenting. This type of lifestyle

appears to be more popular among those urban professionals who choose to live in large urban areas of inner cities. These groups are reported to believe in the negative effect of childbearing on their personal and professional life, to be also more androgynous and less involved in conventional relations and responsibilities. At the same time, bi-nuclear families, where the child is seen as part of a family system composed of two nuclear households with or without the parents sharing legal custody, are also considered to be a group represented among inner-city households. Macklin (1980) also emphasizes the wide diversity of homosexual lifestyles as a variant family form and notes that the great majority of homosexuals are in stable couple relationships or leading satisfying personal lives.

There is accumulating evidence of the acceptance and viability of marriage-like liaisons within the gay community. The housing preferences of people with these types of lifestyles have been addressed in the urban studies literature. People pursue certain goals and values that play an important role in their behavior and preferences. The meaning an object has for people lies in this functional relationship between the object on the one hand and the goals and values of people on the other. The goods that people own could be considered as the expression of their self-worth. Housing is one form of consumption through which the self can be expressed and valued.

Karsten (2007), refers to the residence as a crucial identifier of the self. While the interior of a residential unit may be more related to the identity of its resident, the location and the quality of the neighbourhood are important in terms of expressing people's expectations, social class and lifestyle. The general answer to "Where do you live?" provides information not only about the location of one's home, but also about who that person is. The choice of living in certain places and the decision to leave other places is a part of an individual's expectations, while making social distinctions manifest. The suburbanization process according to Karsten (2007)

invites households with children to move into child-friendly suburban residential environments. However, there are still professional urban middle-class family households who prefer to live in inner-city areas and follow the trend of gentrification.

In traditional housing studies, economic and demographic factors are regarded as the most important determinants in terms of residential choice. A residential decision is considered to be a function of the price a household can afford, the size and the age of the family members and the situation of the neighbourhood within the urban scope of a particular city. Furthermore, the social network is an undeniable factor that could strongly affect the residential decision. Comparing any childless household to those with children, who are both employed, the latter groups are more inclined to build on social networks with neighbours. These types of families try to construct supportive communities based on the mutual exchange of help and sociability. Such social engagement is a reason for households with children to move less often than single people and childless couples. Even if households with children decide to relocate, they mostly move within a short distance, which keeps them connected to their social networks. Urban families, like all residents, orient themselves towards particular neighbours and specific citizens with whom they wish to relate. People mostly prefer to engage in social networks that are homogeneous in terms of a similar lifestyle, class and ethnicity. However, the result of this social sameness seems to result in a certain form of urban segregation between different layers of society (Karsten, 2007).

Beyond the concept of alternate lifestyles, social classes and the role of individual decisions in influencing the patterns of residential mobility, the concept of residential satisfaction in the urban literature has greatly evolved since the 1970s. According to the results garnered from these studies and literature, people are seen as being tied to a more particular location by their bonds to other individuals, attachment to a particular housing unit, attachment to a job, attachment to a neighbourhood-based

organization or other local bonds. The strength of these bonds is reflected in the general level of satisfaction. Obviously, the higher the level of expressed satisfaction, calculating the potential costs and benefits, the less likely the person is to consider moving (Scannell & Gifford, 2010; Kaltenborn, 1998; Speare, 1974).

Studying residential mobility in the context of a household's satisfaction involves a revision of the household's expectations and their needs. In the next theme we will briefly review the human needs and motivational theories and the residential satisfaction literature.

3.2 Human needs and motivations

Before any debatable analysis of people in relation to their environment can take place, one must have a deeper understanding of human need models and the fundamental role of motivations in determining human's behaviour. There are different models of human needs that have been introduced, mostly by sociologists and psychologists (Lang, 1994; Goldstein, 1973; Leighton, 1959; Maslow, 1954).

Among them, the hierarchical model of human needs, suggested by Maslow (1954) is the most dominant, all-inclusive one. It presents human behaviour in terms of the way that a human responds to satisfying a complex array of needs. Based on this theory, motivation is a constant, never-ending, complex and almost universal characteristic of practically every person. According to Maslow (1954) man is a wanting animal who rarely reaches a state of complete satisfaction except for a short time. As one desire is satisfied, another pops up to take its place. The same way, wanting anything in itself implies already existing satisfaction of other wants and

needs. As we can see in Figure 9, Maslow's (1954) hierarchy of needs contains five sets of needs, starting from the most fundamental and going to the most obscure ones. It begins with physiological needs, the need for survival that includes hunger, sex and shelter. This level is followed by the safety and security needs that combine a diverse set of physical and psychological protection from the environment.

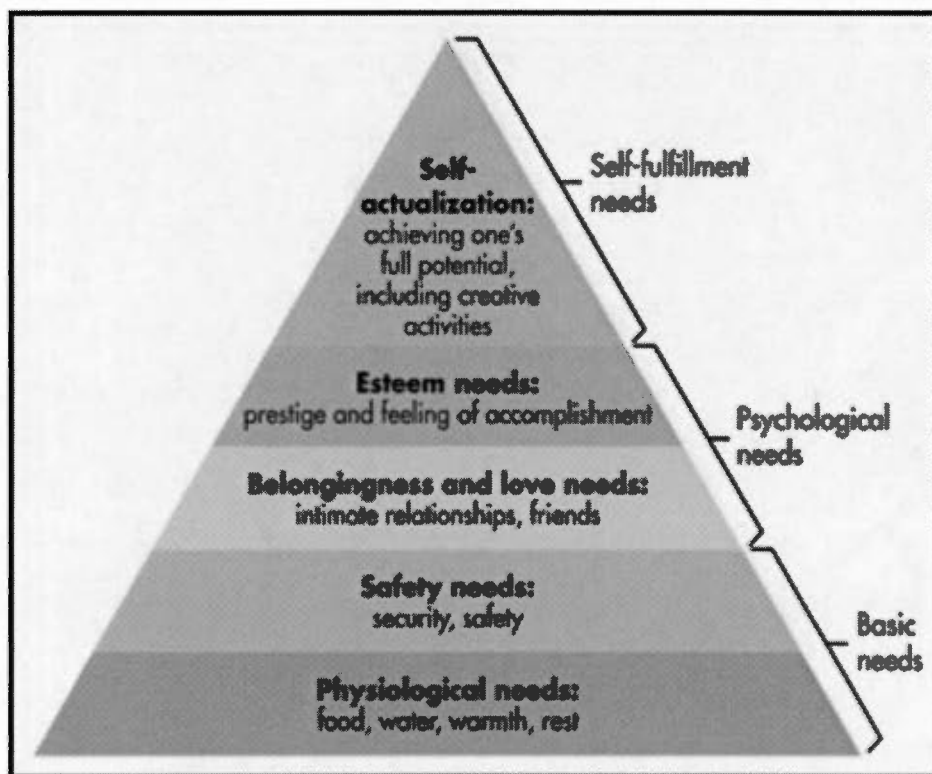


Figure 3.2 The Maslow (1954) hierarchy of needs

The third level of this hierarchy refers to the need for affection and belongingness, mostly identified as affiliation needs. Fulfilment of these three levels will develop the satisfaction of esteem needs that Maslow (1954) describes as the desire for strength, independence and freedom, in addition to the aspiration for prestige, status, attention or appreciation. Satisfaction of the self-esteem need leads to the feeling of self-confidence, worth, capability and being useful and necessary in the world. He argues

that unless individuals are doing what may one is best suited for, there is often a new group of needs known as 'self-actualization needs' that develops. The concept of self-actualization was first introduced by Goldstein (1973) as a driving force that exists within a person and motivates them to develop their given abilities to the fullest extent. Based on this theory, the satisfaction of self-actualization, in turn would guide people in the determination of their life's path. However, the concept of self-actualization used by Maslow (1954) is defined in a much more specific domain. It refers to this concept as the desire for self-fulfillment and the tendency to become actualized in what one is potentially capable of doing. In addition, Maslow (1954) recognizes a second set of needs, referred to as cognitive needs and aesthetic needs. The cognitive needs include knowledge, meaning and self-awareness, whereas aesthetic needs refers more to the beauty, balance and form. The two former groups of needs, according to Maslow (1954), guide shape and complete the processes of satisfaction of other needs while at the same time they have a character of their own. Maslow's hierarchy of basic needs, and his distinction between these needs and cognitive needs is the most comprehensive approach to the study of urban design function (Lang, 1994).

The human needs concept may not follow a definite hierarchical order and the Maslow model of human needs may not apply at all times in all places. Yet, this model acts as a guide to describe the function of architecture, adopted by most Modernist architects (Hays, 1992; LeCorbusier, 1986; Meyer, 1986). They used this model mostly as a basic tool for improving the residential habitat of people. An example of Modernist architects is Meyer (1986) who recognizes a series of human

needs as a basis for design. His model includes shelter establishment in addition to number of activities¹³.

The Radiant City, a concept introduced by LeCorbusier (1948) is another example of approaching the 'human needs' model in the urban design field. He uses this model and suggests as a priority natural light, access to clean open air, and access to a number of services such as recreation facilities and shopping malls. However, the 'Radiant City' concept is widely criticized for its lack of human scale and connection to its surroundings. The complete ignoring of territoriality, privacy, security, social action and symbolic aesthetics in this model are some of the reasons why this model falls short of being ideal (Kunstler, 1993).

Urban scholars such as Lawson (2001) and Lang (1994) who place wide emphasis upon human-environment relations, adapted and developed Maslow (1954) 'hierarchy of needs' in to their method of urban design. According to these scholars, for those who do not experience violence, hunger or disasters, space and spatial needs turn out to be very important.

Lawson (2001) postulates that inhabited spaces are predominant in satisfying three primary categories of spatial needs stimulation, security and identity. However, the balance of needs, at any time will depend on several factors, including personality, physical health, age and the social context. He argues that stimulation in space refers to some levels of amusement or entertainment. Inadequate stimulation in an environment contributes to people getting bored and losing their interests in their environment. However, over-stimulation may distract an individual's concentration.

¹³ Housing design in the Meyer (1928) model takes into account the residents sex life, sleeping habits, gardening, personal hygiene, protection against the weather, hygiene in the home, car maintenance, cooking, heating, insulation and services.

According to Lawson (2001) outdoor places that provide an opportunity for people to gather around and chat are defined as 'sociopetal spaces' and can greatly enrich urban life. He uses the term 'sociopetal' for the spaces that tend to draw people together. This term was first used by Osmond (1959) who also coined 'sociofugal' spaces for the spaces, which tend to throw people apart. However, as Osmond (1959) explains, whether a space is designed to be 'sociopetal' or 'sociofugal' is not simply a function of the broad building typology but a matter of style. By this means, those who repeatedly choose to gather in a particular place are identifiably close in lifestyle, social or ethnic background. The maximum performance in any space may occur somewhere in between these two poles. The need for security, as he clarifies it, refers to demand for stability and structure in the surrounding environment. People seek to avoid high levels of uncertainty and change and they require spaces to assure them of their physical and psychological security. The last important part of spatial need according to Lawson (2001) refers to identity, a strong personal desire to belong somewhere. Lawson (2001) states that for those who relocated from their original residence, there is an increasingly strong need to return to their roots in later life. He defines identity as a need to be located and belonging to a particular space, a sense that could help to explain the innate reasons behind much territorial behaviour. A well-documented argument on Modern, Post-Modern and Deconstructionist architecture failure of the architectural designs is thoroughly explored by Lang (1994). He notes that these styles largely disregarded the individual differences that exist among people within and across cultures, assuming that human beings, being the same organisms, hence have the same needs and functions. The goal is to be sensitive to environments that fulfill not only basic human needs but also the specific needs of people within a multicultural context typical of Montréal's traditional neighbourhoods. We find Lang (1994) to be one of the most complete approaches to integrating the hierarchy of human needs within design concerns. He develops a body of empirical knowledge that can be applied to designing highly inhabitable and comfortable environments.

Therefore, we follow his approach that applies contemporary urban design ideologies to Maslow's (1954) hierarchy of needs. Inherent within this approach, there exists a considerable amount of variability amongst individuals in the manifestation of their needs and within the mechanisms for fulfilling them. Personality types, physiological abilities, stages in life cycle, cultural settings and socioeconomic status are aspects which are recognized as essential indicators in human needs fulfillment.

The concept of human physiological needs, according to Lang (1994), deals with survival, health, developmental needs and comfort. In his model, 'survival' needs are the most basic of human needs. These are referred to as the establishment of healthy biogenic environment by having unobstructed access to clean water, drainage and disposal procedures. He studies health in terms of buildings' natural-ventilation, easy access to open space and the amount of sunshine inhabitants get in their rooms.

Developmental needs, based on this model, are more easily satisfied and achieved through the opportunities existing in recreational activities in playgrounds, playing fields and other sporting facilities. He discusses the concept of 'comfort' both as a physiological and a psychological need. Physiological comfort refers to a person's assessment of the levels of stimulation, access to services and the metabolic comfort in the surrounding environment.¹⁴ Psychological comfort on the other hand, relates to the feeling of safety and security and the personal financial level of comfort. Lang (1994) states that once people reach their basic levels of comfort, their perceptions of needs shift to a higher level and the demand for environmental quality beyond their comfort plains increase. However, he places strong emphasis on the role of cultural and socioeconomic patterns in the

¹⁴ The metabolic comfort based on this study refers to the temperature, air movement and access to sunlight.

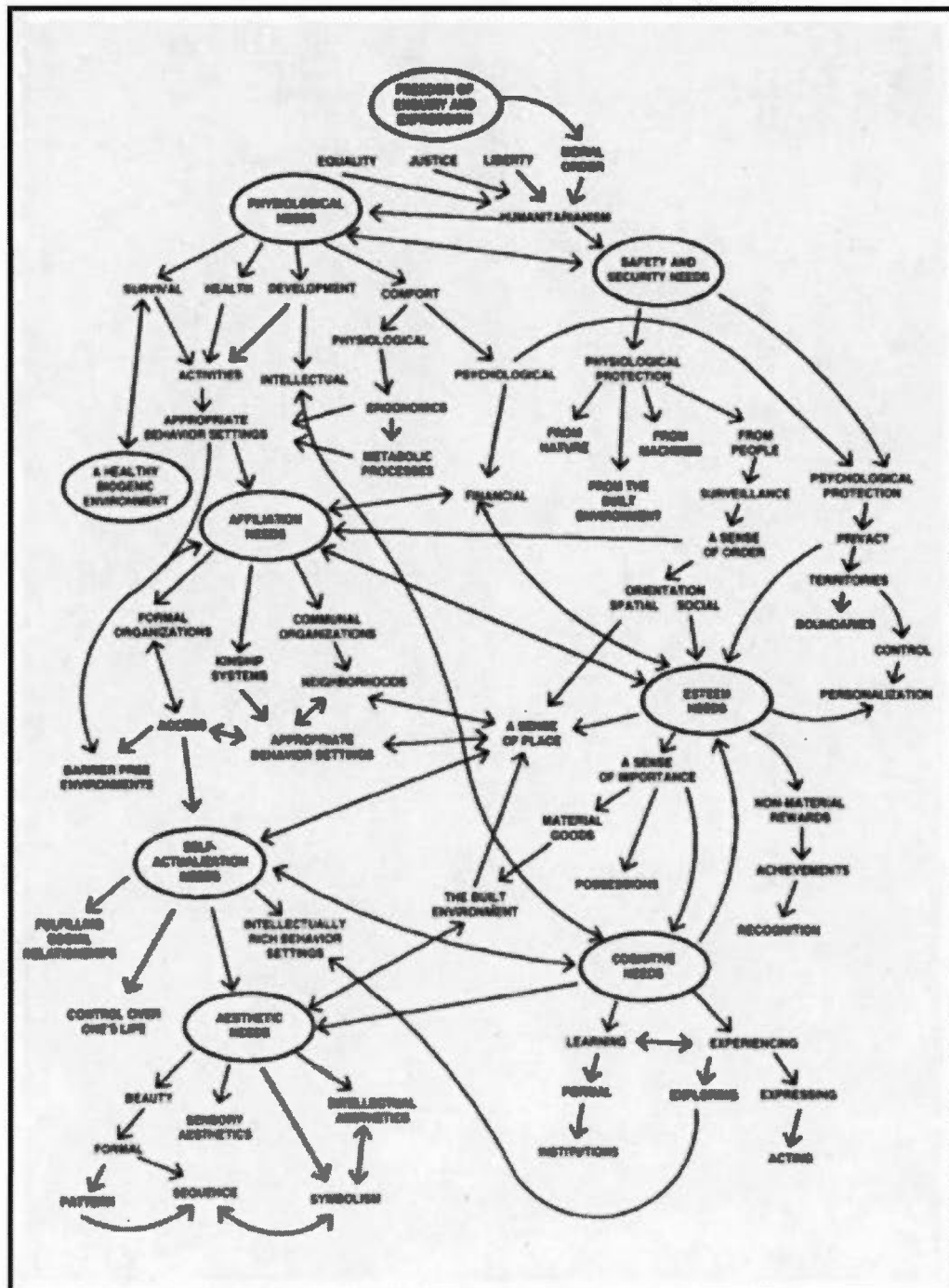


Figure 3.3 (Lang, 1994: 157) hierarchy of human needs and design concerns

On the next level of this model Lang (1994) explores the essential safety and security needs. He illustrates that a sense of security on the one hand is closely related to the survival needs of the physical protection from the environment. On the other hand it also relates directly to the psychological security, affiliation, self-esteem and self-actualizing needs of the individuals. The psychological sense of protection of this model refers to the degrees of control over one's environment. It may be achieved by having enough levels of privacy, through an establishing set of solid or symbolic territorial boundaries. Lang (1994) notes that meeting safety and security needs is also involved in the fulfillment of the needs to be a member of a collective society and of a place, which overlap with the affiliation needs as well.

Lang (1994) mentions two sorts of ways of obtaining security. One is 'static security', which refers to closing oneself off from one's surroundings and the other is 'dynamic security' whereby people are being ultimately self-actualized and they feel secure both as individuals and as member of a group. However, at present, safety levels are partially sacrificed in many aspects of urban design in order to meet certain aesthetic needs of the built environment. Removing the "eyes on the street" from the neighbourhoods with the proliferation of the automobile and the diminution of people, has reduced the liveliness of cities and increased the safety problems within urban areas. Crime is mostly seen as a social problem; however, the physical settings of the environment may appear as a symbol of impending danger. An example of this is closed and covered rows of windows in residential areas that create a dull, boring boarded up street-front atmosphere which is inducing paranoia and sensed as a certain beacon to be avoided by pedestrians.

Meeting physiological needs as well as addressing safety and security issues leads to the next group of needs, introduced as 'affiliation needs'. The affiliation needs would be identified with belonging to a kinship system in the context of family, community

or a nation, aside from belonging to a place. Lang (1994) states that the physical environment and the architectural environment of a place could be a symbolic sign that better fosters the sense of belonging. The sense of belonging here refers to a specific period of time or to a particular group of people and their cultural values. It can foster social bonds and promote a greater sense of identity.

The next level of Lang's human needs model explores the esteem needs in relation to the concept of privacy, status and cultural values. One way of enriching people's self-esteem is through assisting them to achieve the level of privacy which they seek. Being in places that remove the opportunities for attaining privacy will directly reduce an individual's self-esteem. However, the amount of privacy one desires for specific activities is very much culture-bound and is closely associated with the social status of people.

Studying self-actualization needs illustrates the important consideration that each individual is at different stages of psychological maturation in their places of personal self-actualization. Instead, people are mostly searching for greater self-esteem rather than meeting the pre-requests of self-actualization needs. Self-actualized people are those with a high degree of self-acceptance and are accepting of others and tolerate those who have different outlooks. These groups of people have a strong interest in socializing, appreciative of the variety of beliefs and lifestyles which exist in their surrounding world, yet they are capable of overcoming the challenges of their social and physical environments rather than just simply handling them. Lang's analysis of the self-actualization needs of people is based on analysis of the kind of home that they seek. He concludes that self-actualized people would seek a habitat rich in opportunities for learning, high aesthetic appreciation and environments rich in the provision of cognitive needs. Self-actualized people are oftentimes highly motivated

to fulfill their cognitive needs through exploring and being able to apply new lifestyles, new values and new places.

The Lang (1994) model of human needs suggests three interrelated sets of cognitive needs for people. The first level is to develop knowledge and skills in dealing with the world. The second level is the need to satisfy one's curiosity about places, people and ideas and the third one is the joy of experiencing the entertaining acts and behaviours of people. Following these three levels, the aesthetic needs arise as a result of exploring a mystery, a wonder, an admiration or amusement of those experiences. The aesthetic needs are mostly satisfied through the sensory pleasure that an environment provides. They are also fulfilled through experiencing the formal qualities of the environment such as the geometric patterns or the symbolic elements of it.

The literature that argues strongly for the induction of human needs and motivations into residential patterns go further than Lang (1994) and Maslow (1954). Yet, these two models are a base with which to illustrate the ways in which people become satisfied with their surrounding environment, develop their sense of place and create their patterns of place attachment.

Reviewing the related literature in this chapter provides a jumping-off point to pursuing the inquiry of young adults' satisfaction levels, and lays the groundwork for the next themes, which explore the 'sense of place' and 'place attachment'. Applying the role of satisfaction in the context of voluntary mobility, this thesis aims to further understand and attempt to quantify the motivational patterns indicated in choosing Plexes both as dwelling units and as a neighbourhood of choice.

Studying Plex buildings as young adults' residential choice makes it essential to explore what people expect to have in the traditional Plex environment and how they allocate and appropriate the particular features in such dwellings. Understanding human needs helps us to further analyze the degree to which young adults are satisfied with the Plex residential environment. It will also help to explore the Plex neighbourhoods' aspirations for growth.

To be able to answer these types of questions, the next chapter incorporates a broader understanding of the abstract and elusive concepts of 'sense of place' and 'place attachment'. Understanding these two concepts, which often encompass other concepts such as identity, awareness, belonging and rootedness, is critical to our analysis. These concepts will later be used to explain the perception and experiences of the English-speaking young adult residents of the Plex neighbourhoods of Verdun.

CHAPTER IV

SENSE OF PLACE AND PLACE ATTACHMENT

4.1 Sense of place

“In English-speaking society the term ‘place’ is used rather loosely, either meaning a location, a person’s place in society or designating one’s feeling for a place such as room, office or hometown. In the latter, place is a repository of meaning, where one has attained a degree of ‘dwelling’. If a person resides in a place for many years, particularly if that person is raised there, then he develops a ‘ly’, feeling at home and secure there, with feelings of belonging for the place being one anchor for his identity” (Hay, 1998: 5).

In this research we refer to ‘place’ as a combination of human and physical environments. This definition draws particular inspiration from May (1970) who states:

“Place is a piece of the whole environment which has been claimed by feelings” (May, 1970: 210).

In addition, we indicate ‘place’ as an experienced phenomenon rather than an abstract one. When experienced as phenomena Relph (1976) notes that there is a process which involves the individual’s perception of objects and the activities that seem to develop personal and collective identities. By this means any given place is identified in a sense with its name, the way that residents and outsiders think about it and all of the actions which take place in it. Once people recognize the place and recognize themselves in it they inhabit it individually and collectively in such a way that their existence is structured by reference to this environment as its history.

Tuan (1980) argues that 'Place' is a meaning-based concept, in which meanings are not given, rather they are derived from experience with the physical environment and they are socially constructed. As he suggests, spaces become places as they become imbued with meaning through the lived experience of their residents. Thus an inexperienced physical setting is a 'blank space' without humanized characteristics of its own.

Sense of place is not simply a way of describing how people perceive a place. It is a multidimensional concept related to an individual's emotional and symbolic identification with a place. The notion of sense of place within the geographical literature is complex and by analysis multilayered. A variety of concepts in this literature refer to people's particular individual feelings about a place of residents. The common definition of a 'sense of place' is a three-component view that weaves together the physical environment, human behaviors, and social and psychological processes (Carter, *et al.*, 2007; Shamai & Ilatov, 2005; Mazumdar, *et al.*, 2000; Hay, 1998; Shamai, 1991; Alexander, 1980; Tuan, 1980; Relph, 1976; Tuan, 1974; Lynch, 1970).

'Sense of place' is an umbrella concept that includes many other concepts, such as attachment to a place, national identity, belonging, satisfaction, place awareness and commitment to a place. Those who live in a place, visit a place or even imagine a place have experiences from that place or lend meanings to it, which will foster an individual or a collective sense of the place (Shamai, 1991).

According to Lynch (1970), 'sense of a place' is a conceptualization of both what is seen and the way it is seen. This definition contains both physical spaces and human actions that may be used to construct the character and sense of locale, which are represented by residents through their visual imagery. He notes that the identity of a

place provides its individuality or distinction from other places, however this identity might vary between individuals. Following his definition of the 'sense of place', Lynch (1970) postulates that there are five elements in the urban landscape by which people orient themselves. These five elements consist of the 'paths' by which people move throughout the city; 'edges' such as boundaries and breaks in continuity; 'nodes' which are strategic focus points for orientation; 'districts' which are large city areas that a person has a mental image of and 'landmarks' which are easily identifiable physical objects in the urban landscape. In their interaction with the urban environment, people make sense of the city with reference to these five elements. As he states, these elements create legible mental maps that give people an intense sense of place and frame their image of the city. This image is the product of both immediate sensation and the memory of past experience. The clear images of urban places may give people emotional satisfaction, an easy framework for communication and personal identity. Lynch (1970) introduces the concept of 'imageability' and legibility as a quality in a physical object, which gives it a high probability of evoking a strong image for any given observer, where objects are presented sharply and intensely to the senses.

The term 'topophilia', coined by Tuan (1974) refers to the affective bond that develops between people and place. 'Topophilia' refers to a physical response to the surrounding physical environment and to cultural creations. As therein observed, people seek to create personal relationships with the places which they dwell in. He puts forward the point that people have a sense of their neighbourhood as being a part of themselves, which is too close to their personal identity to be seen separately. For new residents, the neighbourhood is a confusion of images, but long-term residence enables people to know the many aspects of a residential space or to be able to see it even from a distance and to reflect upon their experience. Any place within the neighbourhood could be seen as a center of values that attract or repel people.

Later Tuan (1980) notes that sense of place is a subconscious form of knowledge, made up of experiences, which are repeated day after day over the span of years. 'Sense of place' by this means is the identification with a known place, symbolically or emotionally.

Alexander *et al.* (1977) theorize that 'sense of place' relates to an entire environmental experience by which people interpret what their surroundings look like and how it is changing. He states that a 'sense of place' is a sort of connection to the human environment that carries all of the human hopes, accomplishments, ambiguities and stress of existence. The character of a place is given to it by episodes which occur there, and the patterns of events, which are being experienced. These patterns are not necessarily human events but constitute an objective quality, which brings people to describe a place as bad or good. By this means, 'sense of place' could be explored through the objective part of place as location or as a set of shared relationships with the environment or through the subjective experiences of a place and the individual perception of the meanings and symbols contained therein. The place experience according to Alexander *et al.* (1977) is a total sensory experience, which is felt through all the senses (sight, hearing, smell, taste, and touch).

On the neighbourhood scale, Alexander (1980) defines each neighbourhood with place-based details such as the kind of streets, the kind of lots, the forms, sizes and textures of the houses along with their proximity and inter-neighbourhood connections. According to him, although these details give an identical character to a neighbourhood, 'sense of place' is only created as a result of interaction between people and their residential places. Through such an interaction, people could feel a greater sense of freedom to express themselves and participate in the life stream of the 'place'. By this means, the life of a neighbourhood is given to it by the quality of the events, which are continuing to

occur there. These events consist of life relationships between people and their places. He states that the life of a neighbourhood is the final result of a thousand different acts, extended over time and performed by and with people at different times and circumstances. 'Sense of place' in a neighbourhood refers to these life patterns and human-place relations, which are constantly built, rebuilt, maintained, modified, changed and built upon again and again.

However, Relph (1976) indicates that location itself is not a sufficient condition to create a sense of place. In order to create a sense and attachment to a place, there is a need for a long and deep experience within a place and preferably a deeper personal individual involvement in that place. However, myths, landmarks and symbols help play an important and essential role in strengthening the attachment to a place.

"By taking place as a multifaceted phenomenon of experience and examining the various properties of place, such as location, landscape, and personal involvement, some assessment can be made of the degree to which these are essential to our experience and sense of place" (Relph, 1976: 20).

This means the human interaction with the living environment shapes and constitutes the deeper and personal meaning of it. Such human praxis determines the meaning of given places as well as producing and reproducing a personal and collective identification of what a given place is. According to Relph, (1976) 'sense of place' is a deeply shared human need by which people feel a strong identification with something in their urban environment, individually, collectively or mentally, which they believe belongs to them. In such a context, those who have the most experience of a place and have spent the most time in it will most often have the strongest place sentiments. Relph (1976) then proposes different degrees of sensing a place. Such an ordinal scale starts with the lowest level of a 'sense of place' such as 'alienation,

homelessness, and not belonging' and climbs up six more steps to reach the most intense and deepest aspect of the sensing a place, 'belonging to a place and having deep and complete identity with it'.

Shamai (1991) argues that 'sense of place' occurs because people who value their place much more than for purely functional and economic reasons. The value of a place is a result of the memories and experiences that people associate with and apply to those given places. The experience of place is fundamentally unique to each person. An individual's degree of familiarity or detachment with a place is a notion that develops with frequent visitation, imaginings, or habitation in a place. Shamai (1991) illustrates the notion of 'sense of place' in the way people identify their neighbourhoods, the intensity of their attachment, their level of commitment and their sense of belonging to the given place. The intensity of people's sense of place is reflected in their attitudes and behavior. It will affect their participation in place-related activities, in such a way that, the stronger sense of place will cause a deeper connection with the environment. Shamai (1991) provided a scale based on Relph (1976) six ways of sensing a place. This scale represented four ordered categories ranging from an absence of a sense of place to a profound commitment towards it, stages that are developed over time.

0	Not having any sense of place; not everyone assumed to have a sense of place
1	Knowledge of being located in a place; but do not feel connected
2	Belonging to a place; feeling of togetherness
3	Attachment to a place; emotional attachment, area considered special
4	Identifying with place goals; loyalty and allegiance with place
5	Involvement in a place; active role, investment of human resources
6	Sacrifice for a place; deepest commitment

Figure 4.1 The Shamai (1991) scale for measuring the sense of place

This scale measured the variability of the intensity of feelings and behavior of people residing in the same place at a particular point in time. As Shamai (1991) postulates, even though people know that they live in a distinguishable place and can at least recognize symbols of that place, they might have no specific feelings that bind them to that place. At this stage, the awareness of a location does not make them feel that they are individually a part of it. The strength of an individual's sense of place in this model is measured within three phases; yet, there is not always a sharp distinction between these phases. The first phase is 'belonging to a place' in which what is happening in the place is important and the symbols of the place are respected. The middle phase is 'attachment to a place' where the patterns of identity combine with the meaning of the place and its symbols to create a 'personality' of the place. The highest phase of this model will be the 'commitment to a place'. This phase of a 'sense of place' is mainly accessible through studying the actual behavior of its residents. The investments in human resources like talent, time or money, in place-oriented activities or organizations, are good examples that show the deepest commitment to a place. Yet, considering different levels of a 'sense of place' for different people, it is important to elaborate about the specific group that is being probed at a given time and in a given place.

The notion of a 'sense of place' is much more than one's own personal experience. Rather, it has evolved over time, based on shared experiences of different people or the type of feelings that are reshaped among different generational groups. The concept of a 'sense of place' has been seen in the context of place attachment and in relation to other aspects of a place, such as its emotional, symbolic or spiritual sides. Kaltenborn (1998) discusses 'homeland-based attachment' as a common human emotion with varied strengths among different cultures and historical periods. To the local people, a 'sense of place' is promoted not only by their settlement's physical environment but also by the whole range of objects that enhance the feeling

of uniqueness and identity. The concept of a 'sense of place' therefore does not depend on personal experience and their consequences. An example of this could be a comparison between the street where one lives and the whole neighbourhood. The street here could be a part of one's intimate experience. However, the sentiment one has for the local street corner does not automatically extend to the entire neighbourhood. The larger unit acquires its identifiable sense during visitations and imaginings that make the entire neighbourhood become a place. Physical elements, such as houses and streets do not of themselves create a sense of place, but if they were distinctive enough to create a memory, this perceptual quality would greatly help the inhabitants to develop the whole neighbourhood's 'sense of place'.

The relevant literature demonstrates that 'sense of place' mostly refers to a human interpretation of a physical setting, which is constructed through the individual and collective experiences of the place. In such an approach the role of the physical environment has been mostly neglected, since the main focus is placed on place meanings and shared behaviors and cultural processes. Still, there are some other scholars who support the concept of the direct relationship between urban landscape features and 'sense of place'. Among these scholars is Stedman (2003) who states that people are attached to places because of their outstanding physical features such as the color, the texture, the slope, the quality of light, sounds and scents, which are appreciated through the senses and contribute to having an identification with a particular 'sense of place'. He claims that social constructions are important, but it is the local environment that sets bounds and gives form to these constructions. According to him, 'sense of place' is something that people create in the course of time as a result of habit or custom. By this means, the 'sense of a place' is not constructed via experience, but rather is imbued in the setting itself in all its physicality.

'Sense of place' also traces the complex linkage between people's well-being and their residential location. Here, the notion of 'sense of place' is observed in the context of time and the human life cycle in which each different period has its own sensory theme. While it takes time to form an attachment to a place, it is the quality and intensity of the experience that results in having a sense and appreciation of it.

According to McCreanor *et al.* (2006) 'sense of place' is defined through the attachment and detachment that people experience, express and contest in relation to specific places as a personal psychological response. It is as though it is shaped both by locational characteristics and the sentimental experience of people based on their own social, cultural and psychological contexts. By this means, while the neighbourhood characteristics can generate a deeper 'sense of place', the social actions and the degree to which people feel included and accepted within the institutional fabric of neighbourhood and community may strongly affect this generated 'sense of place'. Based on this study, the positive or negative experiences of a place can affect the way people think of that place. On the other hand, the memories of a place form a kind of sense of place, which stay quite solid even through social and physical changes. Therefore, the experiences from former places of residence both in physical features and social contacts could drastically influence the expectation concerning a new residence. Having said that, urban mobility and the rapid shifts in the patterns of urban neighbourhoods and their physical representations would influence the strength of a 'sense of place', for both older residents and newcomers.

The notion of a 'sense of place' and its development has to be seen with regards to the residential status of the inhabitants too. A good example of such concern is Hay (1998) who studied a variety of people in the contexts of out-migrants, tourists, home owners and long-term residents. The conclusion of his study is that tourists or

temporary residents with depthless connections to a place do not develop the strength of attachment that is often found among people who are raised in a place or those who remain there for most of their lifetimes. Although, emotional bonding to particular places can endure even amongst those who move often, those who live longer in a place, especially those who were raised in a place may develop a stronger noticeable sense of place towards it.

Hay (1998) states that people experience both stable periods and transitional periods such as marriage, child rearing and work related situations during their life stages. Presently, for many people in western society, the stable periods seem to be foreshortened so that they experience greater prolonged transitional phases. Due to such increases in transitional periods within urban life, the stable bonding process to people and to places is more often being replaced by degrees of mobility in relationships as well. Without rooted social connections, which Hay (1998) describes as being an important factor in determining a 'sense of place', there will not be as much continuity in people's lives and generations cannot be as easily connected to one another.

When a sense of place is fully developed, it can provide a sense of security, belonging and stability, which become important to more residentially mobile people and are recognized as fundamental to modern urban society. Pascual de Sans (2004) follows the concept of 'sense of place', more specifically focusing on the aspects of mobility. According to this study, mobility consists of moving at a certain moment from one place, where a period of time has been spent, to another place where one arrives and will spend another period of time, which has yet to be established.

The classical theories of mobility movements, propose that people change their place of residence because of a series of constraints or decisions. However, these studies

move to another analysis of migrations that is more focused on the bonds established by mobile people, individually and collectively. From this point of view, a 'sense of place' is studied effectively through the way that people are introduced to each other in the place where they live and have lived, the places that they pass through and the places about which they think and where their ancestors are buried. This type of analysis of the sense of a place may lead to a socio-territorial inscription of people's lives as a whole, and the way they position themselves in the world. In a person's life cycle, one may be involved with many different places, some of which do not carry the same emotional weight and the same degree of significance as others. While some places are left behind as new ones appear, there are certain places that may be present simultaneously in one's personal memories, which leave their marks and their reminders and act upon different levels of individuals' consciousness.

Pascual de Sans (2004) shows that being in a new place for a time may erase the presence of 'sense of place' about former places; however, the latter do remain as hidden layers under the newer contributions. Moreover, the 'sense of place' for some places stands out from others like basic reference points. These are places with which people develop their geographical identification, build their sense of belonging, and strengthen their sense of place. In general, the place where people arrive is almost free of reference points. Gradually, people begin to find areas within this place where they feel less like strangers. They begin to know people from the place and to be known by them, and start building networks. As time passes, they are able to distinguish between being within or outside the physical boundaries and social bounds of the new environment. They then start to experience a sense of belonging to the new environment, where things have a name, can be touched, smelled and imagined, like the moment in which a tree is not just a tree but also a special olive tree.

Mobility, as part of a life history, is constructed around certain places, which exist insofar as they are inhabited. During the process of mobility, some places will be chosen, imposed, searched out, and discovered by chance or through circumstantial moves. People may remain in place, voluntarily or by force, or may leave them behind, feeling more or less a degree of attachment. They may return to them, or may not. But as Pascual de Sans (2004) notes, among all the different places, there will often be only one that acts as a central reference of privileged emotional bonds.

In contemporary society the relationship which exists between mobility and a 'sense of place' is complex and intertwined. At present, except for cases involving serious constraints, people are faced with a continuous choice between staying where they are residing or moving on to another place. There are options of permanence and settlement, as well as options of mobility. Factors such as 'sense of place', attraction, bonding (rooting), attachment and the multiple options of removal and rupture may make people be torn by conflictual feelings about permanence and mobility. With regard to the process for determining mobility decision-making, a better understanding of the concept of 'sense of place' and the role that places could play in people's lives, are necessary factors to study; not the actual decision to move, but the decision about where to move.

4.2 Place attachment

Environmental psychology has been through a series of developments regarding different perspectives of 'Place'. These perspectives have gone from the physical aspects of the limited environment such as dimensions, colors and shapes, to a dynamic and interactive view of people-environment relationships. A dynamic and interactive perspective on the living environment uses the term 'behavior settings '

that includes the social, cultural and psychological meanings of a place (Williams & Vaske, 2003). The behavior setting concept is described as 'bounded standing patterns of human and nonhuman activities' (Barker, 1968), which was later revised to 'social constructs that developed over time' (Wicker, 1979) and also as the product of physical attributes, human conceptions, and activities' (Canter & Craik, 1981).

It is not easy to separate and differentiate all of the variety of concepts that have been used in relation to defining 'Place' nevertheless they mainly represent positive affective ties to it (e.g., 'Sense of Place', 'Place-Identity', 'Place Dependence', 'Place Attachment'). Although there is a considerable degree of overlap amongst these concepts, they still have many distinctive and particular characteristics. In the beginning of this chapter we discussed the notion of 'Sense of Place' in more detail. Now, before moving to the notion of 'Place Attachment', we will attempt to briefly distinguish it from the concept of 'Place-Identity' and 'Place Dependence'.

Aspects of identity linked to place can be described as 'place-identity'¹⁵. The term 'Place-Identity' involves the individual's personal identity in relation to their physical environment. It is the outcome of complex patterns of conscious and unconscious ideas, beliefs, preferences, feelings, values, goals and behavioural tendencies related to the environment. Place-identity may be referred to as an emotional attachment or the symbolic importance of a place that gives personal meanings and purposes to the life of its inhabitants. As such, 'Place-Identity' becomes an integral part of self-identity which enhances individual self-esteem and personalizing a sense of belonging to one's community and surroundings (Williams & Vaske, 2003).

¹⁵ The term has been in use since the late 1970s and in this thesis, as originally, typed with a hyphen. (Proshansky, 1978)

'Place Attachment' may be consigned to as being a part of 'Place-Identity', but 'Place-Identity' is more than just a physical attachment. 'Place-Identity' is a substructure of self-identity, much like gender and social class, and is contained in the personal perceptions and comprehensions regarding the environment. These perceptions and conceptions can be organized into two types of groups: One group consists of memories, thoughts, values and settings, and the second type consists of the relationship existing amongst different locales such as home, and neighbourhood (Proshansky, 1978). Personal identity develops as children learn to differentiate themselves from the people around them. In the same way, Place-Identity develops as a child learns to see her or himself as distinct from, but related to, their physical environment.

In addition to Place-Identity, people construct a social identity through their knowledge of belonging to certain social groups and sharing the emotions and values this group conveys to them (Hauge, 2007). Social identity therefore depends on the personal qualities that characterize the groups to which people belong or have as a positive source of reference, such as nationality, culture, religion, family or neighbourhood. It is suggested that positive characteristics are more likely than negative characteristics to be perceived as in-group attributes. These occur because people are motivated to win and preserve a positive self-image. If people cannot leave a group, they will deny the negative characteristics or re-interpret negative aspects as positive self-concepts.

Social identity is easily transferable and can be further developed into many diverse aspects of a place. A place can be defined as a social entity or membership group that provides an individual with a particular sense of place and identity. A place is often associated with a certain group of commonly interested people, a certain lifestyle or similar social status. In relation to maintaining a positive sense of personal self-

esteem, this means that people will prefer places which contain physical symbols that maintain and enhance positive self-esteem and, if they can, they will avoid places that have negative impacts on their self-esteem (Carter *et al.*, 2007).

'Place dependence' on the other hand, as opposed to 'Place Attachment' is defined as the perceived strength of association between an inhabitant and a specific place. This strength of association is not necessarily positive since it concerns how well an environment provides features and conditions that support individual goals or desired activities. Place dependence thus suggests an ongoing personal relationship with a particular setting. A history of repeat visitation due to 'place dependence' may lead to 'place-identity'. However, 'Place-Identity' is not necessarily a direct result of any particular experience with a particular place, although it generally involves a psychological relationship with the place that tends to develop over time (Knez, 2005).

In recent decades, the Human Geography literature has become more preoccupied with the quality and content of the relationship between people and places, more specifically in the context of 'place attachment'. 'Place attachment' is a multifaceted concept, which includes people, objects, practices and meanings related to the place. In such a context, 'place' has been seen as a factor by which people represent themselves and a part of their identity arises out of their experience within their environment. It explicitly contains emotional content between people and their environment that goes beyond cognition, preference, or judgment. However, globalization, increased mobility and rapid growth have changed the face of cities and made such person-place bonds more fragile (Sennett, 2001). Still, the notion of place attachment remains as a universal affective tie that fulfills fundamental human needs (Scannell & Gifford, 2010; Casakin & Kreitler, 2008; Blokland, 2003; Altman, 1992; Tuan, 1980; Relph, 1976; Tuan, 1976).

Reviewing the literature of human geography and environmental psychology demonstrates clearly that 'place attachment' has been studied mostly in the context of the physical features in relation to the psychological aspects of a given place. The physical features of 'place attachment' have been mostly studied in relation to the elements of identity that transform the physical environment into a symbolic one and make residents more strongly attached to a place. The meanings that people attribute to these elements of a place help them to shape identity and facilitate the social construction of 'place' (Lynch, 1970).

Such social construction of a place develops more emotional bonds that can turn anonymous places into meaningful ones. According to Tuan (1980), these social attachments are argued to be seen stronger than the physical aspects of place attachment. (Blokland, 2003) by adding that emotional bonds are intrinsically connected to interactions. People bond with unique individuals or places, which are not universally interchangeable for them. Such bonds are interactive and are relatively long lasting. However, an attachment, unlike emotions, is a type of relationship without a central objective, in which the actions are meaningful. A person attached to other people or to places might have no real meaningful social interaction with those people or places. In other words, it is perceived rather than acted out.

According to Casakin & Kreitler (2008), people interact with the physical environment through a dual process. They individually shape meanings towards their physical environment, while on the other hand, 'Place' would have the quality of evoking the emotional bond onto itself. The evoked meanings of the physical environment might be positive for security and peace, negative for danger or even neutral in some cases. This study is more concerned with the concept of cognition, which refers to any form of cultural values, attitudes and memories that may be

evoked by the meaning of a place. This type of individual cognition has an important effect on the personality and behavior of the residents who use the place. The positive aspect of individual cognition of 'Place' is well documented by Kaltenborn (1998) who suggests that 'Place Attachment' may offer an enhanced sense of security and comfort. Having a desire to maintain proximity to significant places is attributed to a sense that these places offer protection and a sense of security. The more people feel secure, the more they have the confidence to explore their environment and are more willing to venture forth from their places into their surroundings.

Scannell & Gifford (2010), in one of the most complete studies of the subject, put forward a multidimensional concept to systematically identify the many variables implicitly interested in place attachment. They define the concept of 'Place Attachment' with regard to a three-dimensional framework of person-based, place-based and psychological based processes. According to this model, the person-based attachment occurs at both individual and cultural group levels, which may overlap. At the individual level, it involves personal connections to a place such as memories, realizations and milestones. Although place characteristics have an important role in the construction of place meanings, the individual experiences of a place form the basis for their feelings of place attachment. On the cultural level, what is common amongst people, such as the shared meaning of a place and symbolic patterns, creates and reinforces patterns of attachment. On this level, people become attached to areas wherein they may practice and preserve their culture through shared experiences, values and symbols. Place-based attachment concerns the environmental patterns of attachment in both the physical and social contexts. The physical characteristics of a place could be at the center of ones' attachment. In general, people with greater place attachment were less willing to substitute their place for another. However, they do not become directly attached to the physical features of a place, but rather to the meanings that those features represent. By this means, the physical aspects of

attachment constrain the symbolic meanings that a place may adopt. According to Scannell & Gifford (2010) the social dimension of place attachment is stronger than its physical dimensions. As they note, people are more attached to places that facilitate social relationships and group identity. However, the social interactions that the place affords them would affect the intensity of that attachment. Their study argues that the strength of the attachment is more intense at the individual home and on a broader city level than at the neighbourhood level.

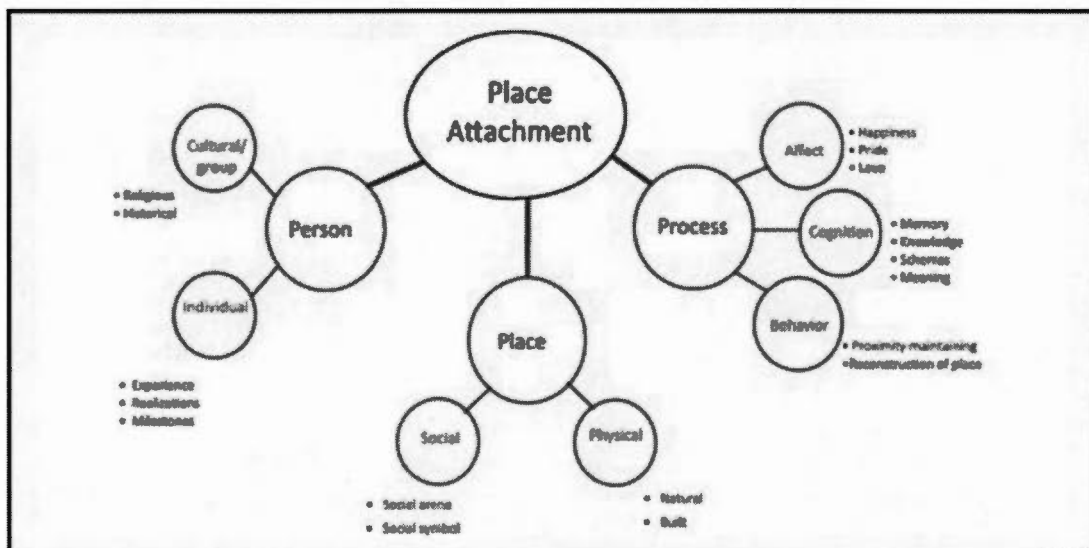


Figure 4.2 (Scannell & Gifford, 2010:2) tripartite model of place attachment

The psychological process of place attachment concerns the way in which 'place' becomes important for people. This process consists of affect, cognition, and behavior. Affect is a term used by Scannell & Gifford (2010) to assert the central role of emotional patterns such as place belongingness and affective terms like feelings of pride, sense of place or a general sense of well-being in person–place bonding. Scannell & Gifford (2010) note that to be attached to a place is to know and organize the details of the environment into sets of personal cognitions. These cognitions incorporate themselves into self-definitions such as memories, thoughts,

values and preferences, which result in helping to deliver behavioural settings of its inhabitants.

Recreating a familiar town in the process of the reconstruction in post-disaster cities is a good example of the behavioural dimension of place attachment. According to Scannell & Gifford (2010) attachment is thus a proximity-maintaining behavior that is expressed through actions. This means that place attachment is a positive and affective bond between people and a place which brings a feeling of closeness to it. However, one may be highly attached to a place and yet depart from it regularly.

“In fact, place attachment can even become dysfunctional when an individual with a rigid bond to home is reluctant to leave it. Sometimes people may miss important opportunities or even put themselves in mortal danger for the sake of remaining in their place” (Scannell et Gifford, 2010:4).

As Scannell & Gifford (2010) argue, behavioural aspects of ‘Place Attachment’ are not necessarily territorially as based on control or ownership of a place. Instead, they are affective, proximity-maintaining bonds that can be expressed without any purpose of territorial defense. Although territoriality and place attachment may overlap, place attachment behaviors include social supports and place restorations in a positive way. In fact, people are more attached to environments in which they find their personal values or live their personal history. Such places are symbolically meaningful through memories and have connections to the past. It could be a childhood home or places that seem to link us to those people whom we have lost. When the physical representation of a place reminds us of the episodes that occurred there, it allows comparison of the past with the present. Such comparisons recreate a greater sense of bonding, rootedness and belonging, which all result in a greater feeling of attachment.

Reviewing the general argument about the concept of place attachment, this thesis is focused on exploring this notion at the neighbourhood level in addition to the home scale. Numerous studies argue that social and emotional involvement with a neighbourhood could produce a strong sense of attachment to it (Kusenbach, 2008; Blokland, 2003; Stedman, 2003; Cross, 2001; Kaltenborn, 1998; Woolever, 1992; Wellman & Wortley, 1990).

In most of these studies the neighbourhood is considered as an arena for socialization of the residents and the protection of family and status. In such a context, social and emotional involvements are produced through the interaction with friends, relatives, familiarity with the neighbourhood and satisfaction with the community that one lives in. Place attachment in the context of a neighbourhood may be better explored through the community ties of the households. Community is traditionally defined in relation to three basic components: shared territory, significant social ties and meaningful social interactions. However, in the highly mobile and digitalized societies of today, the place-based communities may vary dramatically in size and the territorial variables do not have clear boundaries to study.

Connerly & Marans (1985) propose a model to explain the relationship between attachment and the evaluation of neighbourhood attributes, social interaction and satisfaction. In this model, there are some overlaps between attachment and satisfaction. The social interaction factor seems to be more strongly related to a person's attachment to a place and the evaluation of neighbourhood attributes is more strongly related to satisfaction with a place (see Figure 4.3). This model shows a weak relationship between attachment and evaluation of neighbourhood attributes as well as satisfaction with social interaction, while the effect of both aspects on each other could still be of significance.

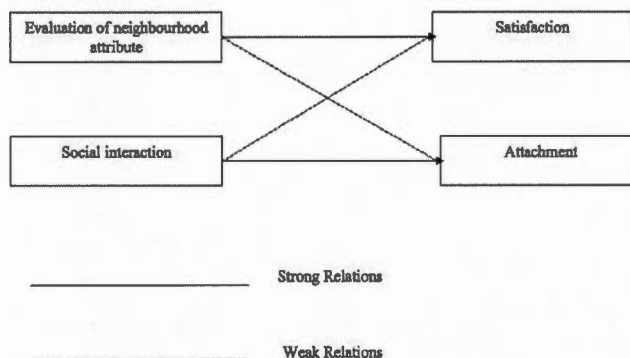


Figure 4.3 The Connerly & Marans (1985) relationship between evaluation of neighbourhood attributes, social interaction, satisfaction and attachment

The other model proposed by Connerly & Marans (1985) is the perceived neighbourhood quality model, which explains satisfaction and attachment as the two main factors in measuring neighbourhood quality. In this model, the personal characteristics are studied in relation to general social status and local social status. The general social status is concerned with the resident's status in society, considering race and social economic status. The general social status of residents and the neighbourhood's attributes are expected to have a strong impact on one's evaluation of a neighbourhood. The local social status is more about people's position in the neighbourhood. It consists of parameters such as length of residence and stages in the life cycle or age. This study hypothesizes that the length of residence and the life cycle stage strongly affect the neighbourhoods' social interaction and the patterns of neighbourhood attachment (see Figure 4.4).

In the perceived neighbourhood quality model (see Figure 4.4), homogeneity in the neighbourhood is defined as another important variable that has an impact on social

interaction, attachment and the evaluation of neighbourhood characteristics. The authors assume that people with friends living nearby are more attached to a neighbourhood. Such openness and friendliness of neighbours will enhance the specific social interaction between people and have an impact on the evaluation of neighbourhood attributes. According to Connerly & Marans (1985) neighbourhood homogeneity could bring a sense of comfort and security for people, because they would feel that the neighbours share similar values and characteristics. Individuals of similar status, economic constraints and life-stages choose more similar locations and type of dwellings. As a result, relatively homogeneous zones emerge and within these neighbourhoods' interpersonal attachments and networks develop.

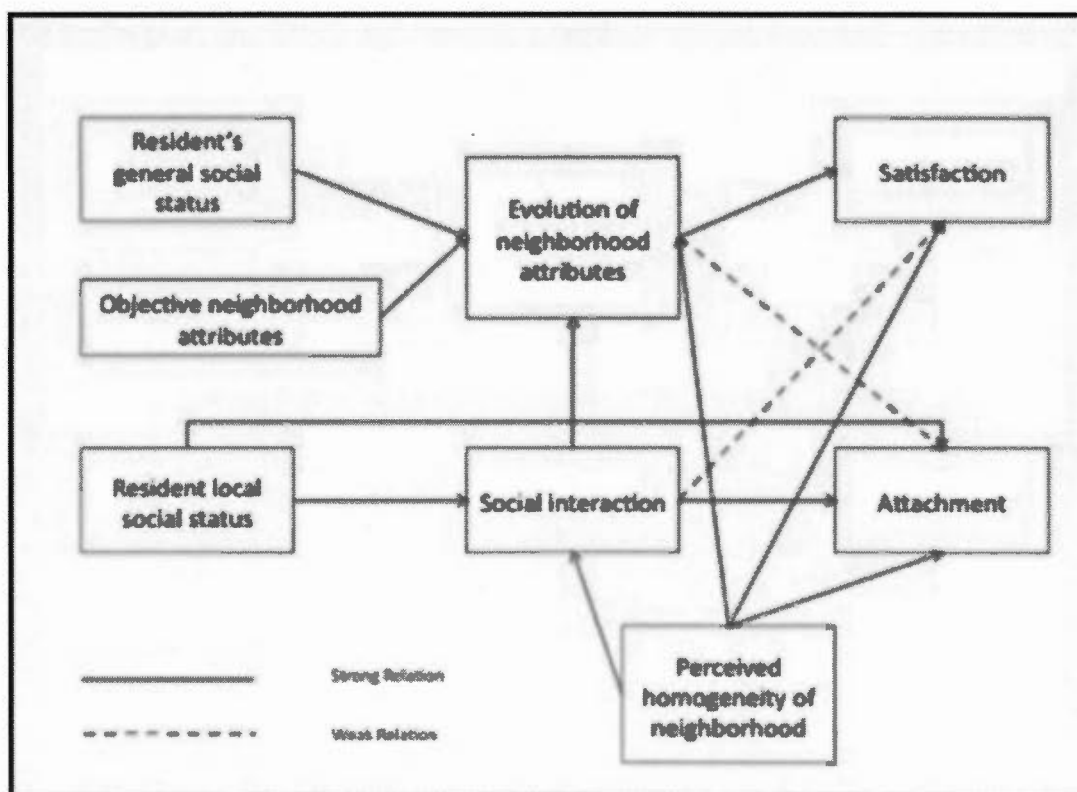


Figure 4.4 Connerly & Marans (1985) Perceived neighbourhood quality model

In the perceived neighbourhood quality models, the evaluation of neighbourhood attributes is shown to be in direct relation with neighbourhood satisfaction. At the same time, social interaction is considered to contribute primarily to neighbourhood attachment. Putting the concept of satisfaction as an antecedent for place attachment, Stedman (2003) notes that people may remain attached to their places even when they become dissatisfied with changes in the quality of that environment. The long-term residents of a community may also be highly bonded with a specific place; however, they could be dissatisfied with current changes or developments in their own residential area. This is especially true for place identity, which is intimately bound with one's self-identity.

Amongst different studies, (Kusenbach, 2008) gives specific credit to (Hunter, 1974, 1980) for his contribution to the theoretical advancement that suggested several nested layers of communities of different scales that coexisted in a spatially hierarchal structure.

“Communities must also be considered as symbolic variables, which range in scale from small social blocks to larger neighborhoods and communities to larger regions of the city. These “hierarchies of community” imply that an individual may select a level of symbolic community that best satisfies the needs and interests with his particular social statuses, and that what is defined as the community may vary between individuals and for the same individual in different settings and at different times” (Hunter, 1974:179).

later, (Kusenbach, 2008) developed this concept and introduced the model for ‘hierarchy of communities’ that includes A- micro-settings (a number of adjacent households whose members share a sense of connection and engage in specific patterns of interaction), B- street blocks (the segments of streets that run between

two intersections and all the dwellings that face them), C- walking distance neighbourhood (the sections of the urban environment that transcend individual street block and have meaningful geographies in the eyes of residents) and D- enclaves (any intentional cluster of residents who share a significant social status, identity or lifestyle).

Kaltenborn (1998) argues that satisfaction with an environment could facilitate social interactions and the achievement of personal goals, which build up good memories of a place and foster the development of place dependence thus enhancing the sense of place attachment. According to this study, while the levels of social interaction may have a strong role in developing a sense of attachment towards a place, the evaluation of neighbourhood attributes plays the most important role. The modern communications and transportation technologies help people to have more chances to find friends, make acquaintances, or communicate with relatives in other neighbourhoods. Therefore, the presence or absence of such emotional bonds in the neighbourhood may not have a strong effect on neighbourhood satisfaction. Instead, some other factors, such as quality of local public services and neighbourhood amenities are assumed to spatially tie people to their neighbourhood.

Residents' community attachment consists of their experience in a particular setting combined with feelings about that place. Cross (2001) ranks the levels of attachment, identification and involvement with the community, on four main levels; these are rootedness, place alienation, relativity, and placelessness. Rootedness is the strongest

type of community attachment, within distinct communities. Rootedness is dedicated to those who have a strong attachment to their community in which they were raised and, or to the community they have lived in as an adult. Place alienation is more greatly associated with a negative assessment of the place, where people do not personally identify themselves with that place and are to a large degree not satisfied with it. Some people are alienated from a place because of induced moves, while others may be dissatisfied because the place they love and feel rooted to has changed as a consequence of many new people having moved in around them. This level is characterized by the loss of a deep sense of rootedness.

‘Relativity’ is a term Cross (2001) uses to describes individuals who have lived in so many places in their life that they are not strongly rooted to any particular community. For such highly mobile people, the sense of home may feel non-geographically related instead of being tied to a specific place. ‘Placelessness’ on the other hand, is referred to as a lack of both place-based identification and emotional attachments to particular places. While ‘relativity’ categorized individuals have a mobile sense of home and can cultivate a sense of home wherever they are, ‘placelessness’ individuals do not have an articulated or place-based sense of home.

Wellman & Wortley (1990) focus more on the role of community ties as a principal means by which, households receive supportive resources such as emotional aid, small personal services and companionship. According to this study, when there are strong ties inside a community, more attachment is expected to develop towards it. Yet, not all community ties are supportive and some people may even avoid burdening network members with requests for support for fear of overstressing their ties. In this study, the frequent contacts and residential proximity serve to facilitate relationships, promote the shared values and mutual awareness of needs, while it may also help to facilitate the delivery of aids and diminish the feeling of loneliness.

With advances in communication technology, nowadays people are able to provide some forms of companionship, emotional and financial aid over long distances, but still residential proximity makes it easier to deliver services even when relationships are not imbedded and strong. The only personal characteristic that is directly associated with emotional ties within the community refers to gender. Thus, women are assumed to be more involved in providing emotional support to woman friends. These supportive actions are more addressed in terms of companionship, child minding, emotional aid and help with domestic chores.

It is observed that in our present society, modern communication methods and innovation in our transport system have reduced the need for physical proximity. On the other hand, most of the neighbourhoods in modern cities have changed from public-familiar to more public-anonymous, like the transition from counter service to self-service in commercial zones, through which people relate to and know less about others. In this context, the frequenting of local commercial zones such as old corner shops becomes diminished and the large supermarkets because more anonymous venues, which transform social relations into being more public-anonymous (Blokland, 2003). Identifying the social standing of others and being recognized by them gives a special sense of belonging to the local residents. However, the interdependencies between neighbours are relationships that do not involve individuals being overly sociable. Once the neighbours no longer depend on maintaining a relationship with each other, their interdependencies become more anonymous spaces. Yet, being an actual neighbour is not necessarily the reason for establishing and maintaining relationships because individuals may be, for any of a number of personal reasons, unwilling to help each other or are simply less social or helpful than in the past. It can be partially, attributable to the changes in the patterns of neighbourhood use, duration of residence, the neighbourhood's social structures changing personal views about the value of neighbours and a reaction to others in

physical proximity. The concept of 'place attachment' has also been studied in the context of induced residential moves. According to Speare (1974) induced moves are the result of natural disasters, war, immigration or relocations. These types of movements, which cause the residents to lose familiar structures and social settings often result in feelings of sadness, fear and loneliness. Generally, people become more attached to the settings that represent the important events which have occurred in their past. Therefore, in the process of relocating to a new place, some people select locations that are as similar as possible to their former ones. It is through such behavioural reactions that new residents could be reminded of their previous neighbourhood. The same process exists in the desire to restore areas to which people were personally bonded. In fact, previous residential experience influences people's environmental preferences and choices.

Taylor *et al.* (1985) investigated the types of individuals who were more or less attached to a place. Their study showed that the demographic and social class factors are linked to attachment levels; furthermore, life cycle and social class significantly influenced this attachment. As a result, households with young children and those of higher social class are more attached to their residential environment. Accordingly, attributes such as age, income, number of children living at home and educational level further categorized persons who showed different patterns of attachment. The study also suggests that being surrounded by similar ethnicity or social class is associated with stronger local social involvement.

The question of location is addressed by Taylor *et al.* (1985) to illustrate the kinds of places to which people are more likely to become strongly attached. However, in this study, attachment to a place is conceptually distinguished from human territorial functioning. Territorial functioning represents intertwined patterns of attitudes and behaviors that are goal directed such as access to, control over and obligations

surrounding a given place. When the territorial function grows, the attachment to place may be enhanced. Then the inhabitants start to identify themselves with their places on a larger scale (city, nation) or smaller scale (neighbourhood, workplaces, homes).

“People may refer to themselves by describing what country they live in, what city or town they come from, or if they are a "country" or a "city person." These are more than social references; they refer to physical places where people live” (Hauge, 2007:1).

In this research we use Childress (2004) to categorize the notion of territory to include both the public and the home territories. The ‘public territory’ as discussed in this study, refers to having the freedom of access but not of freedom of action. By this means, although public territories are open to all people, certain economic factors and certain appropriate behaviors adjust the limits of freedom and levels of comfort there. Public territories are more subjects of unacceptable or unwanted social behaviors, thus some official and unofficial controls may apply to them.

The ‘home territory’ combines both the physical dwelling and the surrounding exterior spaces. Hence, the transition from private to public territory in the context of ‘home’ is often confused with the notion of privacy, behavioural freedom issues and the sense of personal control. In fact the boundaries between public and home territories are not always clearly differentiated in the social world. The zones that may be defined and be used as the public space by a group, may be referred to and used as a home territory by others. In addition, the home territory is not necessarily a clearly defined physical space and it is not a space that is either publically or personally owned. Childress (2004) explains the difference between territory and tenure with respect to the appropriation of space.

This study argues that the Western understanding of space is based on a tenure model, a mode of appropriation where space is owned. However, Childress (2004) argues that the mere act of using a space communicates territoriality and that the ownership of a space is not enough to create territory. He indicates that referring to territories as having user rights and ownership patterns makes it difficult to determine whether a public space could be a part of one's home territory if the collective public owns it. Instead, he suggests that the residential units and the residential neighbourhoods are both essential elements of daily urban life and that the private territory of home cannot exist without the public territory that surrounds it. Such movement between different spaces and territories serves to unite them and leads to a kind of openness in the psychological conversion of public areas into home territories by local residents.

At the end of this chapter, we find it necessary to point out the concept of heritage and the heritage awareness phenomenon as it may promote in vernacular architecture context of traditional Plex neighbourhoods.

Heritage, which could appear in the form of an object, a monument, an inherited skill or a symbolic representation, creates a unique sign of identity that is directly related to the collective social memory in a designated area (Nyaupane & Timothy, 2010; Bessière, 1998). The concept of heritage leads to a discussion of the continuity between past and present, through the chain of meanings that are essential to more fully understand and realize the context of the surrounding environment. From this perspective, heritage has to be studied more as an evolving social product that is constantly under review and ever changing, than something fossilized that gets continuously handed down per se. Thus, heritage is not a mere collection of things and products but a real social selection that links between the object and the particular values of people at a particular point in time in an ever evolving history.

The heritage awareness in this context is a kind of an evolving judgement based on changing common values that concerns the specific importance of symbols and identity granted to the given objects. The greater levels of heritage awareness in an old established landscape are not only important for aesthetic reasons but also to create a 'sense of place' which is linked more to the traditional forms of the architecture. The heritage awareness is also an important dimension of strengthening individual and collective local identity and contributing to encouraging personal investment in a given landscape. The lack of awareness towards a heritage landscape can cause huge damage on the overall architectural quality or historical association of it within a whole neighbourhood and surrounding areas.

Our research affirms that a person's sense of place heightens an awareness of a positive feeling towards an environment whereas we observe in 'rootedness' a further sense to enhance a feeling of being home there. This thesis examines specifically the life of English-speaking young adult residents in Plex buildings, the most potent symbols of vernacular architecture of Montréal. This will be examined both in the residential home and corresponding neighbourhood context. The notion of 'place attachment' in this study refers to a positive personal emotional bond within the physical environment. It will be examined through the prism of emotional, cognitive and activity-based attitudes of English-speaking young adult residents toward the traditional Plex environment of Verdun, Québec, with regards to the particular and influence of attributes of Plex architecture and its streetscape on these residents.

CHAPTER V

RESEARCH METHODOLOGY

5.1 Methodological strategy:

The goal of this thesis is to explore and analyze Plex' residents' range of expectations and depth of feelings towards this specific type of living environment. To that end, we needed to include residents' views, norms, social relations, and interactions with other residents and with the actual physical setting. The study attempts to explore the level of the residents' personal interpretation and perception of the Plex environment, the inspired meanings or derived images which predominate, and the social and spatial identity characteristics related to their experience in these unique form of residence.

The methodology utilized for the investigation of 'sense of place' and patterns of 'place attachment' in Plex neighbourhoods calls upon a qualitative descriptive study using individual interviews. We found comprehensive in-depth semi-structured interviews to be the most effective to deeply explore the thoughts and issues relevant to our participants. However, before implementing the research methodology, we performed a number of exploratory interviews in order to test the validity of this research methodology. These semi-structured interviews were done with a small group of five people who have lived in Verdun's Plex neighbourhood for at least the past three years. This exploratory research was extremely useful in determining whether the interviewees had a good understanding of the specific research questions and whether or not they would be able to provide relevant and useful responses.

The utilization of this methodology brought forth a more specific overview of the residents' actual shared values, perceptions, and interpretations of Plex neighbourhoods. Drawing from the exploratory research conducted with this test group, we were able to make minor revisions to our interview guide.

5.1.1 Area of interest

Plex housing, which shapes countless residential streets in Montréal, are present in several neighbourhoods. There are vast numbers of Plex housing in the North-end Cartierville, Bordeaux, Ahuntsic, Sault-au-Récollet, Montréal-Nord, Saint-Laurent, Park-Extension, Villeray, Saint-Michel, and Saint-Léonard districts. By moving down to the central districts of Montréal, we find huge number of older Plex neighbourhoods in the north of Outremont, La Petite-Patrie, Rosemont, Plateau Mont-Royal, Centre-Sud, Hochelaga-Maisonneuve, and the eastern most edge of the Ville-Marie borough. In the west-end of Montréal, the majority of Plex neighbourhoods are found in the south-west areas of Pointe-Saint-Charles, Verdun, Côte-Saint-Paul, Ville-Émard, LaSalle, Eastern Lachine, but also in west-end communities such as Notre-Dame-de-Grâce, Snowdon, and Côte-des-Neiges. The appearance of Plex neighbourhoods in the far eastern part of the city is also quite significant in Nouveau-Rosemont, Mercier-Est (commonly referred to as Tétéreault ville) and Anjou. Significant pockets of Plex neighbourhoods exist in older sections of Rivière-des-Prairies and Pointe-Aux-Trembles (please see Appendix B for Montréal Island boroughs and municipalities map).

All of the foregoing neighbourhoods are grouped together in 17 boroughs. Only the West Island (Dorval to Senneville) is largely devoid of Plexes, being mostly post-World War 2 suburban single-family housing territory. Off island, Laval, the North

Shore and South Shore communities all have significant pockets of Plexes, both old and new.¹⁶ Amongst all of the traditional Plex neighbourhoods of Montréal, the Plateau Mont-Royal is the only borough that has been well studied over the past decades (Laterreur et al., 2008; Rose, 2004; Van Criekingen & Decroly, 2003).

Since the considerable body of relevant literature related to Plex districts is limited to the Plateau Mont-Royal neighbourhood, this thesis attempts to break new ground by studying a different traditional Plex neighbourhood located within Montréal, namely in Verdun. Tracking the residential preferences of English-speaking residents aged between 29 and 45, and their participation in the inner-city renewal and the recent residential mobility phenomenon of Montréal, are also areas which have not yet been fully researched and analyzed.

5.1.2 Population characteristics surveyed

In our study, we thus focused on English speaking young adults (aged between 29 and 45 years old) who living in Verdun, Montréal. The aforementioned age group corresponds to some degree to Generation X. However, according to different versions of the Generation X age definition, some people in our sample fall just outside the generally recognized age limits identified as the Gen X group. Nevertheless, a large proportion of our sample was composed of people belonging to the Generation X group. We therefore review some characteristics of people from this age group, because this information may have some bearing on the results of our

¹⁶ Hanna, David (2013), interview on Plex housing distribution in Montréal.

study. Williams *et al.* (1997) argue that Generation X begins with those born from about 1961 and ends with those born in the late 1970s in the United States and Canada. Foot & Stoffman (1996) claim that this generation was composed in many instances of single children with no siblings who grew up in the child-care systems. Generation X individuals have oftentimes seen their parents devote their entire working life to just one employer, while living mostly in one residence in the suburban areas surrounding an urban environment.

The literature suggests that the Generation Xers, who came after the Baby Boomer generation, were shaped by the global political and social changes which occurred during this generation's developing youth. Events such as the Vietnam War, the fall of the Berlin Wall, the end of the Cold War, The Thatcher-era government in the UK and Reagan-Bush in the US, helped to shape the culture and upbringing of Generation Xers. As witness of vast social change and the redressing of many societal injustices, relative to previous generations, Gen Xers are more open to diversity and have learned to more openly embrace differences in areas such as religion, sexual orientation, class, race and ethnicity. However, they have also seemed to have become farther individualistic, mistrustful of corporations, and more interested in maintaining an extra equitable work-life balance (O'Bannon, 2001).

According to Salt (2004), Gen Xers are for the most part not particularly loyal or tied to any one job or place. If their job isn't taking them where they want to go professionally or career-wise, they tend to move on to other employment with another company or enterprise. Compared to their parents, Generation X members have much more flexible attitudes towards their residential choice as well. The context of housing consumption from Gen Xers demonstrates substantially different patterns than that of the prior generation. While much of their parents' generation may have

been raised and occupied single-family housing units, mostly in the suburbs, increasingly Generation Xers have tended to choose to raise their children in more high-density affordable accommodations, closer to city centers. Salt (2004) also noted that while the Generation Xers prefer to locate close to the central business district, they are also seeking to purchase housing in direct competition with baby boomers, who are more senior and established in their careers and have had a longer time for saving the funds necessary for purchasing quality housing in chosen neighbourhoods.

Statistics Canada (2006), Census of Population, shows that the eastern part of Verdun is heavily composed of various Plex neighbourhoods, where between 21% - 30% of the population is between 29 to 45 years old age bracket (see Appendix C-D). As we mentioned before, there is an absence of a great deal of studies on inner-city Plex neighbourhoods of Montréal, other than in the Plateau, not to mention the lack of basic documentation of Anglophone young adults' residential mobility rates and decisions within the seventeen boroughs of Montreal. Hence, Verdun, with its high abundance of established Plex neighborhoods, which has been the historic residence of many generations of Anglophones, was the selected as a very appropriate district for this thesis. The linguistic patterns in the eastern part of Verdun reveal that between 21% to 36% of the total population in this area speaks English most often at home (Appendix F)¹⁷

¹⁷ Parallel to this, Statistics Canada (2006), Census of Population provides other linguistic information based on mother tongues, knowledge of an official language and the first official language spoken, which do not significantly refer to the Anglophone population. According to Statistics Canada (2006), knowledge of official language refers to the ability to conduct a conversation in the chosen language. However, those who are able to conduct a conversation in English are not necessarily true Anglophones. At the same time, it defines mother tongue as the first language learned at home in childhood, which is still understood by the individual at the time of the census. Again, the language at birth, which is still understood by an individual, may not be in use anymore as the current language of daily use. Moreover, when the person is not in a regular contact basis with his parents and childhood linguistic roots, the mother tongue language might not be used as often.

Studying the Plex neighbourhoods of eastern Verdun, we considered young adults' regardless of their country of birth and ethnic origin, whose household language is English, i.e. they speak English most often at home, as representatives of the Anglophone population study group. In conclusion, from this study we contend that the Plex residential areas of Verdun are increasingly a home to a significant proportion of a new group and generation of young adult Anglophone residents. We wished to further understand and clarify how much the 'sense of place' and 'place attachment' in this area is attributable to the new and/or historic presence of an Anglophone population upon the residential choice and degree of satisfaction amongst the young adults' Anglophone population in these socially evolving and historic architectural neighbourhoods.

5.1.3 Area of the study

According to Statistics Canada (2006), Verdun is a distinct historically established district in the southwestern part of Montréal, Québec, Canada, with a total population of 66,078 residents spread out over an area of 9.68 km². Verdun is a socially heterogeneous borough with an economically diverse group of residents, which contains not only high-income people (mostly in the Nun's Island separate section) but also individuals living below the poverty line at the other end of the economic spectrum. Verdun is a residential urban environment that is made up of several different types of housing. Triplexes predominate in the eastern part of Verdun, while duplexes are more common in the central part. The western most part of Verdun is made up typically of single-family houses. The variety of housing, and the advantages in public transportation as well as proximity to local shopping and service centers, plus quick, convenient access to downtown, helps to position Verdun very

competitively in the regional housing market of Montréal.¹⁸ Relating more specifically to Verdun's housing and population characteristics, this thesis examines some key statistics. According to Statistics Canada (2006), between 71.5% and 100% of the structural type of dwellings in the entire eastern part of Verdun is composed of Plex housing. This clearly illustrates the extent to which the eastern part of Verdun is overwhelmingly dominated by Plex dwellings.¹⁹

Based on Appendix E, which is extracted from data in Statistics Canada (2006), this research divides the period of construction, into three main periods. The first group refers to pre-World War 2 construction, which comprises the Plexes which were built before 1946. The second group comprises the post-World War 2 Plexes, referring to those built in the period of 1946-1960. The last group refers to the modern Plexes, those built since 1961. In this research the traditional Plex neighbourhoods are defined as those areas dominated by buildings that were built in the pre-war period up to 1945, plus those built in the immediate post-war period of 1946-1960, now about half a century old. The eastern part of Verdun, thus is of particular interest as it falls mostly within the pre-1946 construction period, which corresponds with the notion of "traditional" Plexes. It is noteworthy that parts of the eastern Verdun zone contain over 48 % of pre-1961 Plexes, which rise up to 81% in some areas. This makes our area of study clearly a rich traditional Plex territory.

By overlapping the information gathered from the Plex densities, population characteristics, period of construction, and linguistic data (Appendix C, D, E, F) of Plex neighbourhoods of eastern Verdun, the two zones that optimize all three identified variables, thereby matching this research's interests, are census tract 302 as

¹⁸ (Montréal, 2011) Ville de Montréal, Verdun district, Master Plan, profile of 2006

¹⁹ It has to be noted that Statistics Canada (2006), refers to residential buildings as "dwellings", which this research chooses not to use because of the potential confusion with "dwelling units".

the optimal triplex choice (83% triplex, 21.38 % English-speaking population, 29.36 % young adult population) and census tract 314, as the optimal duplex choice (96% duplex, 35.27% English-speaking population, 20.44 % young adult population).

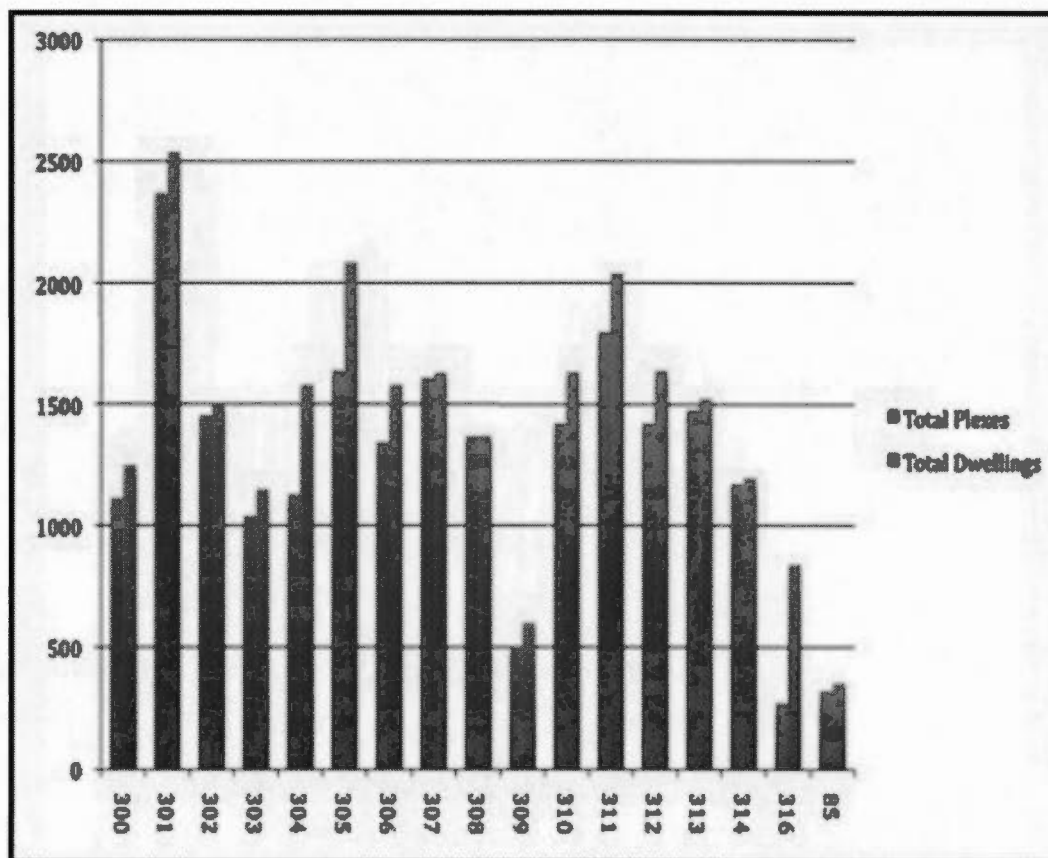


Figure 5.1 Ratio of Plex housing to the total number of residential buildings in eastern Verdun²⁰

²⁰ Statistics Canada, 2006, Census of Metropolitan Area, Census of Population, Catalogue no. 92-146-XPB

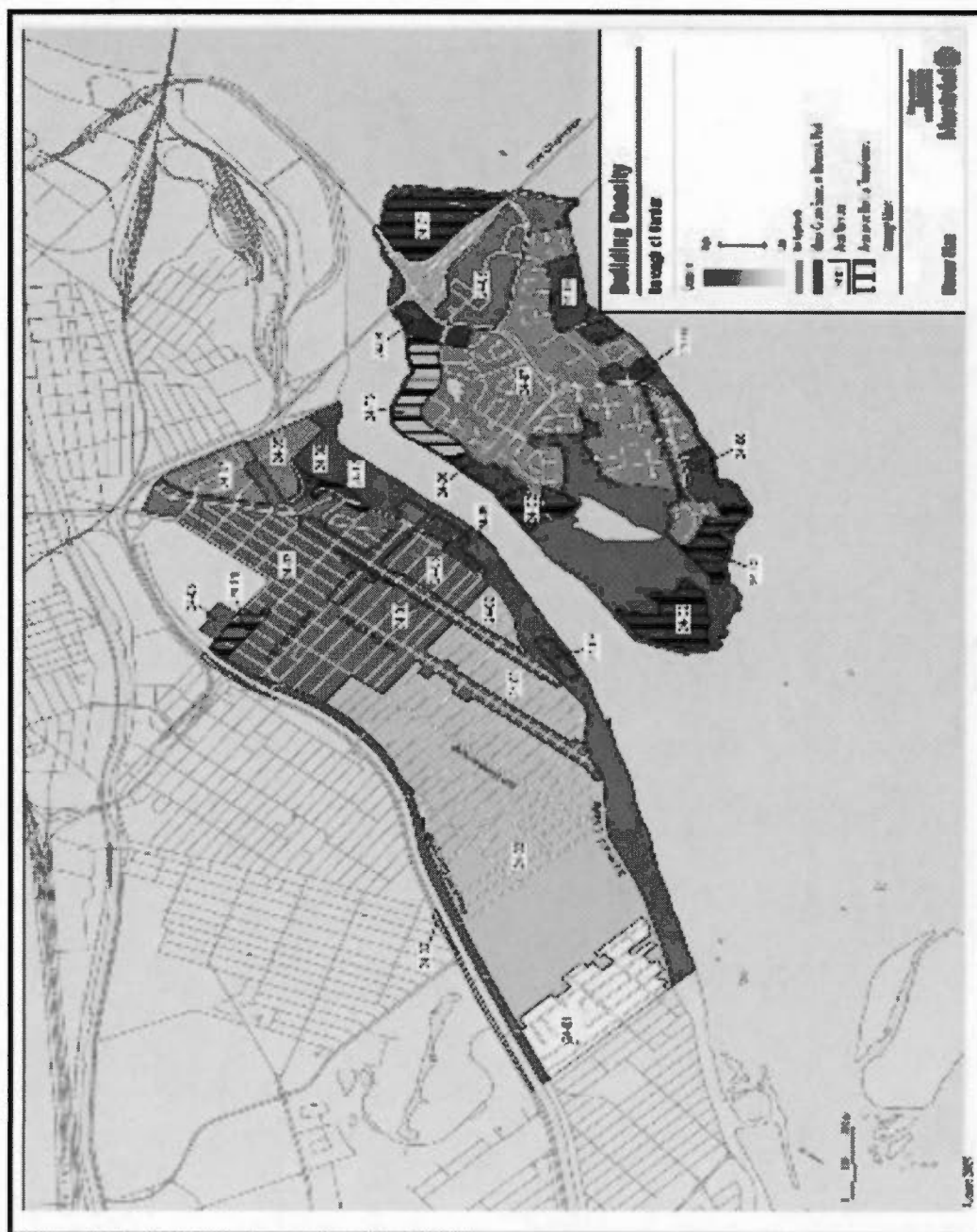


Figure 5.2 Building densities: Borough of Verdun, Montréal, Québec.²¹

²¹ Ville de Montréal, Verdun district, Master Plan, profile of 2006, Part II, Building density.

While longevity of residency is critical in the development of 'place attachment', this research limited the sample population to that group of young adult occupants who have resided in these Plex neighbourhoods for three years and more (Appendix G). Studying the five-year duration patterns of residential mobility in Plex neighbourhoods of Verdun showed that the low-mobility residents represented between 32% and 64% of all residents. Although, it is not possible to determine if the low-mobility factor is with young adult residents, our two selected zones (302 & 314) fall well within the range of stable residents, both being in fact close to the statistical average (39% & 64%).

5.2 Data collection method: Semi-structured interviews

Semi-structured interviews allowed us to develop a far greater and comprehensive understanding of how the 'Plexdom Life' is represented and perceived depending on the background, length of residency, and actual experiences of the respondents. For all of the interviews, we collected certain comprehensive demographic and economic information, including gender, age, parental status, ownership status, job skills, tenancy status, and length of residence in the Plex environment. We also collected pertinent information related to the respondents' residential history and perceptions including: type and level of flat in the Plex building; the flat's renovation status; outdoor appendages (transition zones); number of years living in the neighbourhood; number of years in their current dwelling; their previous types of residence; their memorable significant socio-spatial experiences; and their reasons for moving into their current Plex dwelling.

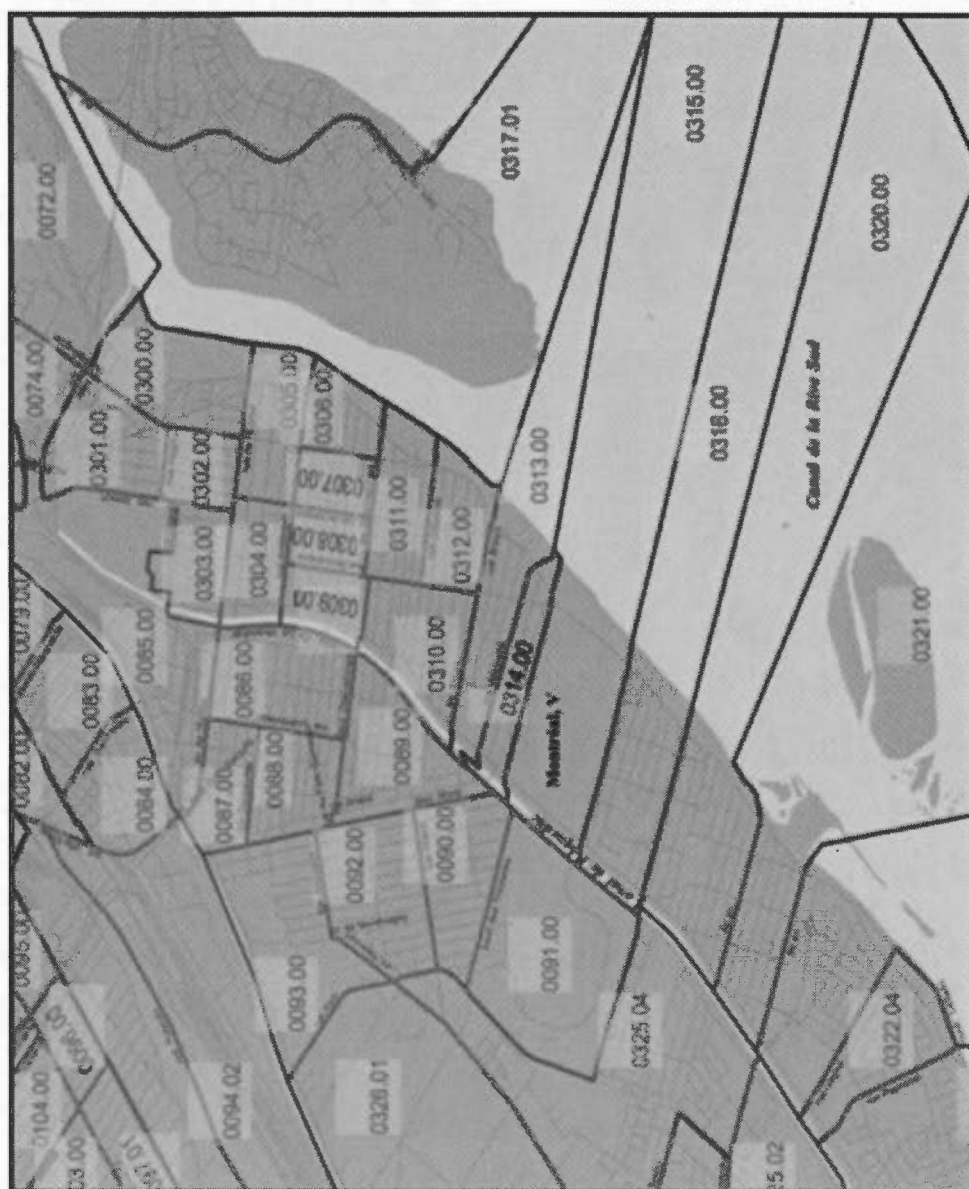


Figure 5.3 Selected census zones of Plex neighbourhoods in eastern Verdun and environs²²

²² Statistics Canada, 2006, Census of Metropolitan Area, Catalogue no. 92-146-UIB

Although the residential choice is most often a joint decision made by couples, gender differences or the sexual orientation of the individual may nevertheless be a significant factor when it comes to determining their positive or negative sense of locale. Yet, to study the human interaction within the physical and spatial context of Plex neighbourhoods this research placed less emphasis on the individual dimensions of gendered experience than on which factors served to underlie the collective idea of a 'sense of place' and 'place attachment' related to Plex environments. All of the interviews in the course of this thesis were conducted in English, and typically each interview lasted at least one hour. The interviews were all digitally recorded and a verbatim transcript was made.

5.2.1 Sample selection

Our sample study was selected amongst English-speaking young adults (between 29 and 45 years of old), including renters and owners, living in Verdun's Plex neighbourhood for a minimum length of three years. The initial sample was selected through various personal contacts, including friends, university colleagues, and local associations. The sample selection then continued with a snowball sampling of the population study, whereby, at the end of each interview we would ask interviewees if they could think of neighbours, friends or family members who lived in the neighbourhood who may be willing to participate in an interview of this type. If they indicated that they may know someone who would be interested in doing this type of comprehensive one hour interviews, we left project outreach materials and asked them to pass them on to potentially interested interview candidates, who were then supposed to contact us directly.

We are aware that this snowball sampling method may result in a disproportionate inclusion of individuals with inter-relationships, and the exclusion of more isolated individuals, who were not connected to any of the networks which we have tapped into. This makes it more difficult to arrive at a statistically objective generalization with regards to Verdun's entire population of Plex residents. To address this concern, significant effort was made to establish contacts with a variety of other local organizations that have connections with neighbourhood residents and arranging interview with them rather than relying on results strictly obtained through snowball sampling. Soliciting different community centers and organizations within traditional Plex neighbourhoods of Verdun, our specific point of entry was through various Anglophone contacts referred by Dawson Community Center, a non-profit recreational and educational organization with deep roots in the English community located in Verdun. In addition, we benefitted from a number of referrals from a local social media group called Verdunes of the '70's, composed of present and former residents of Verdun from the 1970's.

In total, we conducted qualitative, semi-structured interviews with thirty-five English-speaking young adult residents of Plex neighbourhoods of Verdun (between 29 and 45 years of old). For a summary of the process of recruitment for the sample selection please refer to Appendix H. In addition, we performed nineteen informal exploratory interviews, selected from a snowball sampling of the similar demographic group of residents of the same borough (Verdun), who presently inhabit high-rise buildings, a different type of residential dwellings than Plex buildings. We are well aware that these nineteen informal interviews of Verdun residents in our target age group living in high-rise towers do not strictly speaking correspond to rigorous scientific sampling standards for qualitative in-depth interviews requiring a minimum of 30 interviews. However, their responses to questions regarding their socio-psychological attitudes towards the built form they inhabit (tall dense concrete

structures containing apartments joined by common interior corridors and fast mechanical elevators leading to a common entrance) are contrasting enough to their counterparts in our plex environment with its smaller more human scale structures, small number of flats with shared exterior semi-public semi-private spaces, that we have opted to include this material in this thesis. While it is anecdotal evidence, it has a certain comparative value for understanding the way that physical and spatial residential environments might influence social human behaviours, perceptions, and attitudes such as tolerance, privacy, neighbouring and sense of community, amongst the residents of different residential type of buildings within the same borough (see chapters six and seven). We believe these illuminating responses to be indicative of deeper psycho-sociological responses to the built environment which further research will ultimately be able to prove. We therefore submit these responses with the caveat that they do not, strictly speaking, represent a proper scientific sample. Participants' socio-demographic profiles are fairly diverse. In terms of sex, females were slightly over-represented, comprising 20 of 35 participants. The ages of interviewees ranged from 29-45 years old. The participants mostly had no children (25 of 35), were sole tenants (16 of 35), and they often owned a pet (19 of 35). For the detailed socio-demographic characteristics of interviewees please refer to Appendices I & M. In terms of housing type, 19 respondents lived in Duplex type buildings, while the rest of 16 interviewees experienced living in Triplexes. For more detailed information on the dwelling background of interviewees and their present housing status please refer to Appendix K.

5.2.2 Interview themes to explore sense of place and place attachment in traditional Plex neighbourhoods:

We built our semi-structured interview guide around the following five themes:

(1) Mobility- the decision-making process of young adults towards moving into Plex neighbourhoods, (2) Neighbourhood Analysis: the perceived and preferred neighbourhood characteristics (3) Physical and spatial analysis of Plexes, (4) Social life analysis of Plexes, (5) Satisfaction of human needs and expectations in a Plex environment and consequent residential aspirations (Please refer to Appendix N for a complete interview guide).

(1) Mobility decision-making process of young adults towards Plex neighbourhoods:

We began the interview process by asking residents about their previous places of residence; the reason(s) which they felt that they needed to move; how they became interested in moving to a Plex neighbourhood; how they discovered their current residence; whether they have friends or family that were living in the same neighbourhood; and other related thoughts and observations.

(2) Neighbourhood analysis (perceived and preferred neighbourhood characteristic:

In this part, we asked our interviewees about their perception of a variety of factors that can impact the liveability of the Plex environment. Neighbourhood safety, accessibility, affordability, attractiveness, and location-based social settings, are amongst the most significant focuses of this theme. The range of differences between the perceived and preferred neighbourhood characteristics will later demonstrate residential satisfaction levels of Plex neighbourhoods.

(3) Plex physical and spatial analysis:

Through this theme, we explored the impact of Plex particular physical and spatial environment on the levels of residents' housing comfort. The residents' behavior in the outdoor appendages of Plex buildings as well as their responses to the heritage awareness of this inherent traditional architectural form, comprised the main focus of this theme.

(4) Plex social life analysis:

To explore what impact, if any, the Plex unique spatial environment has had upon residents' participation in neighbouring and developing social bonds within the neighbourhood, we questioned residents about their experiences of Plex social life. Moreover, through this theme we tried to investigate if the socio-spatial context of Plex buildings presented any particular lifestyle changes which residents may have had to address and institute some level of personal adaptation.

(5) Satisfaction of human needs and expectations in the Plex environment and residential aspirations:

The objective of this theme was to ascertain the levels of residential satisfaction among young adult residents of traditional Plex neighbourhoods, which corresponded with their residential aspirations. In this part the residents were asked in detail about what makes them satisfied by living in the Plex environment, and if they moved would they consider living in another Plex style environment or neighborhood.

5.2.3 Ethical considerations:

The use of interviews as a method of data collection raises specific ethical questions. We did our best to phrase questions in a way that minimized the sense of discomfort interviewees might have by talking about their personal experiences of Plex residential environment. However, as to our experience and knowledge the interview process was not a source of negative feelings and emotions for interviewees. Instead we received from the interviewees tremendously positive feedback, that were both encouraging and uplifting. A great number of our interviewees expressed an interest in being kept abreast of our overall research findings and results.

The next important part of our ethical considerations was to be assured of the participants' understanding of the purpose of the study, and freely affirm their acceptance of participating in the interviews. In order to do so, we prepared an information letter that explained about the thesis author and the project. This information letter was also used to enable us to get in contact with potential interviewees. We also designed a consent form with the thesis author contact information (Please see Appendices O, P). These two forms were presented to interview participants in person (or via email in the event that participants established contact with us to arrange for an interview in this fashion). Indeed, we went through both forms orally at the beginning of the interview before asking participants to sign the consent form and begin the interview.

The other concern regarding the ethical considerations of our study concerned protecting the anonymity of the participants. To this end, all interviewees were given

an interview number in the written transcripts. Neither in the record, nor on the transcription of the interviews are the real names of the participants attached to the information that they provided. Equally, if the interviewees mentioned any names, we replaced them with pen names within the text.

5.2.4 Data Analysis

The transcription of our semi-structured interviews generated an extremely large amount of data. Therefore, organizing, analyzing, and making sense of pages and pages of interviews turned out to be a particularly challenging task. Although, there is no established formula for exactly transforming this data into exact quantifiable findings, we chose to use “NVivo”, a specialized computer software to facilitate the storage, coding, retrieval, comparison, and the linking of our data. According to Richards (1999), “NVivo”, is one of the more widely documented software packages designed for qualitative data analysis. This software provides a variety of effective tools for manipulating data records, browsing, coding, annotating and gaining access to data records quickly and accurately, compared to those completed by hand. It also can conduct multiple searches and search for more than one code at the time. As well it can be used to attach memos at certain points of the text.

“NVivo has tools for recording and linking ideas in many ways and to remove rigid divisions between ‘data’ and ‘interpretation’. It could connect the parts of a research project, integrating reflection and recorded data and manage and synthesize qualitative ideas” (Richards, 1999: 4).

For this reason we used the qualitative data analysis software Nvivo10 to store and organize our data²³. We imported all of the documents generated by our transcripts into NVivo10 and then coded sections of the text that spoke to a particular theme and assigned them to a category or node. Since even small pieces of qualitative data can have multiple meanings, one part of the text can belong to many different nodes. The real question is how to create nodes that enable us to do a profound comprehensive analysis of the transcripts.

In this thesis we have explored a very broad range of potentially relevant themes in both descriptive and analytical segments. During the analysis process, we moved some nodes to the wayside while others became more important. Then, some nodes were grouped together into higher-level categories while still others were subdivided into subcategories. After all of these important adjustments, we systematically went through all of the transcripts in NVivo10 once more and assigned particular segments of text to a code (or a 'node' as it is referred to in the NVivo10 program), or even multiple codes in some cases. Furthermore, we applied socio-economic and personal characteristics of the respondents to the nodes, through which we were being able to ascertain how respondents with different attributes reacted to a particular theme.

During the process of data analysis, nodes were organized hierarchically into a "tree of nodes". Using this "tree of nodes" enabled us to create a coding tree with data that addresses general themes at the top-most part of the hierarchy, and sub-divided into more specific narrative codes. Later on this process, some codes increased in importance, while others became more marginal. Moreover, during the process of data analysis. Please see section 5.2.7 for a detailed node description.

²³ We created the categories of data as represented in Figure 5.4

5.2.5 Limits

This section will outline some of the limits to the research methodology. It is confirmed that those studies which used interviews as their main tool of gathering data, relied to a large extent on the ability of the researcher to establish a good and deep connection with the interview subjects. In this research, we interviewed people from a wide range of different social statuses, ethnicities, educational backgrounds, occupations, and personal backgrounds. However, as the depth of the openness of the interviewees will attest to in the following chapters we assert to be extremely successful in establishing a good, meaningful connection with our interviewees. Moreover, we acknowledge that English is the second language of the thesis author. Therefore, it is potentially possible that being in this position as a researcher might serve as a limitation to some degree with some of the participants. Lastly, a significant limit of this research could be it's limited final potential for consensual generalizations. Due to the limited number of participants and their particular language patterns as well as the age group, it is expected that the findings highlighted by our research will in some ways be particular to such a specific socio-demographic context.

The main contribution of this thesis resides in examining whether and in which ways the unique physical and spatial form of Plex buildings are conducive to developing social networks and community ties amongst residents. Furthermore, our analysis contributes to further improvements to the general understanding of the unique architectural form of Plex buildings in the framework of neighborhoods, and to add nuance to how an architectural form is able to have an influence on human response and behaviors as well as induce increased social life for the inhabitants.

5.2.6 Node analysis description

In this thesis we have opted to address the description of our analysis grid in the research methodology chapter rather than in the Annex. The reason for this decision relates to the importance of understanding the different themes of our analysis grid and the context that each node refers to, prior to the next chapter, which starts with our findings. Below is the complete description of our analysis grid in terms of different sections and their sub-sections. This analysis grid has five themes: (1) human needs, (2) residential (home) analysis, (3) neighbourhood analysis (perceived and preferred neighbourhood characteristic factors), (4) urban analysis (mobility decision-making) and (5) aspirations. In order to clarify some of the categories, we have added examples from our research interviews.

1-1. Human need / Physiological needs:

Physiological needs vary from survival needs to the need for a comfortable environment. The physiological human needs in this thesis studies the aspects of the Plex environment, which give residents a feeling of comfort rather than one that simply affords survival. Comfort is understood to be a complex concept, which predominantly relates on a very basic sense to a physiological state, while it also inherently has strong psychological characteristics, which are essential contributing factors to this feeling of satisfaction.

1-1-1. Human need / Physiological needs / Comfortable housing:

In this thesis, meeting the physiological needs of residents is fundamental for providing comfortable housing, which is critical for the maintenance growth and

development of human activities. It will investigate the comfortability of Plex type housing for young adult residents within the physiological as well as the psychological context. Comfortable housing according to Lang (1994) should be defined based on one's metabolic comfort zone, their financial status, as well as the levels of personal satisfaction based on the visual and sonic control over the living space in a barrier-free environment. On this basis we are interested in exploring the role of each of these elements in making young adult residents of Plex neighbourhoods achieve a level of comfort in their residential environment.

1-1-1-1. Human need / Physiological needs / Comfortable housing / Metabolic comfort:

In this level we examine the Gen Xers levels of metabolic comfort, which mostly refers to the amount of sunshine inhabitants get in their rooms, the flat's natural air ventilation, the flat's internal temperature, the disposal procedures in the neighbourhood and living in a clean residential environment. This is an example of how residents approach the metabolic comfort:

"I like the light and one reason I don't like the flat is that in my bedroom I don't have light because there is a small window. I can't stay long in a dark room like that".²⁴

1-1-1-2. Human needs / Physiological needs / Comfortable housing / Financial comfort:

The financial comfort in this sub-category refers to the degree in which Gen Xers find themselves comfortable with the cost of living in Plex neighbourhoods. This is an example of how we approach financial comfort in comfortable housing analysis:

²⁴ 34 years old- Male- 5 years of occupancy in the Plex environment.

"Oh, of course I feel good to find [a place] here because look, [it's very] good price for such a place! It is not that expensive".²⁵

1-1-1-3. Human needs / Physiological needs / Comfortable housing / Visual comfort:

In this sub-category we examine the psychological comfort in terms of having visual control over the surrounding space in a Plex type environment. The possibility of having 'eyes on the street' is questioned here as a factor that may promote visual comfort. This is an example of discussing visual comfort:

"I can see people around and of course people can see me but not face to face and I feel comfortable not to be in close contact with them".²⁶

1-1-1-4. Human needs / Physiological needs / Comfortable housing / Sonic comfort:

Gen Xers level of control over the source of undesired sounds as well as their adaptation to the noisy environment is a matter of concern in this sub-category. Below is an example of sonic comfort analysis in a Plex environment:

"Oh, they walk and I hear, they talk I hear [...]. Imagine those above me, any time they move I can hear them. Oh, at first it was very annoying but now it gets better. I mean I get used to it. It becomes a part of living here".²⁷

1-1-1-5. Human needs / Physiological needs / Comfortable housing / Barrier-free environment:

²⁵ 38 years old- Male- 3 years of occupancy in the Plex environment.

²⁶ 41 years old- Female- 4 years of occupancy in the Plex environment.

²⁷ 33 years old- Male- 3 years of occupancy in the Plex environment.

While many people are without disabilities and are flexible to adapt to whatever situation is presented, many are not. A barrier-free environment provides access with dignity to physiologically impaired people, those in wheelchairs or walkers, as well as the older groups of residents. On this level, Plex buildings are analyzed in the context of a barrier-free environment, despite the sample being a younger one.

"I have a memory of an old woman living in the duplex beside me on the second floor and she had an emergency and the ambulance had to come. And I remember I was watching her being taken down, her place had a long staircase and it was so difficult to bring her down with those spiral stairs. You see they are not wide enough. Even bringing a fridge is so hard in these apartments".²⁸

1-2. Human needs / Safety and security needs:

This category explores the fulfillment of safety and security needs for young adult residents of traditional Plex neighbourhoods in terms of psychological and physiological protection.

1-2-1. Human needs / Safety and security needs / Physiological protection from the built environment:

This sub-category reviews Plex buildings, structures, materials and functional details more clearly in order to understand the level of physiological protection that people feel in their surrounding built environment. This is an example of how people meet their physiological protection from a Plex environment:

²⁸ 38 years old- Female- 7 years of occupancy in the Plex environment.

"These houses are like made of paper and wood and things like this, so one house burns and its like the entire block is on the fire and in couple of minutes it is done. Oh, even thinking about it makes me nervous".²⁹

1-2-2. Human needs / Safety and security needs / Physiological protection from machines:

Safe streets and paths of people's movement with regards to the levels of segregation between modes of transport and the relationship of pedestrians to drivers is explored in this sub-category.

"[...] You are very close to the river and you have huge beautiful parks there. You can go with your kids for a walk and bike. It is very safe and I see kids playing in the street too. There is nothing happening which may harm them. I definitely don't see what would be missing there for a family to install if they want".³⁰

1-2-3. Human needs / Safety and security needs / Physiological protection from people through surveillance:

This sub-category evaluates any possible source of social conflict, anti-social or criminal behavior as well as the levels of the neighbourhood's internal security, which is essential for people, especially women, children and the elderly to comfortably make use of public spaces. The degree of spontaneous surveillance or natural looking out for one's neighbours in Plex neighbourhoods, as well as law enforcement systems, such as a police presence in the neighbourhood, are studied here. The following is an example of how one perceives the physiological protection from others through natural surveillance:

²⁹ 31 years old- Female- 5 years of occupancy in the Plex environment.

³⁰ 39 years old- Female- 4 years of occupancy in the Plex environment.

"Here, is not like you go out and you see police cars flashing with horns and going fast. But it looks very safe. There is of course a lot of police passing by. But more importantly, everybody watches out for everybody. And I take it as a blessing if something suspicious happens to me, at least they would know".

1-2-4. Human needs / Safety and security needs / Psychological protection within controlled boundaries:

Psychological protection here refers to what Lang (1994) states as having a desire to avoid the unexpected, to be in control, to know where one is in the social and physical surroundings, to be protected from other people and social situations within certain controlled boundaries of the environment. In this sub-category we study the physical or symbolic boundaries in Plex buildings to understand the levels of Gen Xers privacy and territorial controls over their environment. An example of controlled boundaries is indicated below:

*"It is very safe here, you almost know everybody after a while and this is good. They can watch you whenever you go out but at least you know them, if I don't feel to talk to them I will not and I think people understand that you are not in the mood today. It is not like just because you are sitting close you have to talk."*³¹

1-3. Human needs / Affiliation needs:

In order to realize the role of the Plex environment in fulfilling the young adults affiliation needs, we need to understand the nature of the everyday activities that bind people together as well as the symbols that give them a sense of belonging.

³¹ 35 years old- Female- 8 years of occupancy in the Plex environment.

1-3-1. Human needs / Affiliation needs / Kinship to people:

The kinship system in a neighbourhood is not necessarily through the blood relationship but mostly via shared occasions such as Thanksgiving day or sports events. On this level, we explore the level of Gen Xers kinship in the Plex neighbourhoods through these kinds of shared experiences and occasions. An example of such an approach is illustrated in the comment below:

"[...] Last year during the holiday I think he invited us for a drink and I made something and he introduced me and my boyfriend to his girlfriend who is a journalist and then once we went to watch hockey together again. So we have a kind of friendship too. Not so often but still sometimes we may do stuff like that".³²

1-3-2. Human needs / Affiliation needs / Natural surveillance and a sense of community:

In this section we examine the physical characteristics of the Plex neighbourhoods and their role in the development of a sense of community and residential social interaction between Gen Xers and other residents. The ability of Plex buildings in providing an opportunity for young adult residents to see and to be seen, to have casual contacts and engage in levels of social relations with people contribute to a sense of community. This is an example of a Gen Xer involved with natural surveillance and a developed understanding of the sense of community in Plex neighbourhoods:

"[...] I know my neighbour not just because we are in the same building. We see each other most often in summer time when we are on our balconies and we hang out and I feel like we care for each other. You know that's how I actually felt in the first place and I feel it now, which is nice".³³

³² 33 years old- Female- 5 years of occupancy in the Plex environment.

³³ 31 years old- Female- 3 years of occupancy in the Plex environment.

1-3-3. Human needs / Affiliation needs / Homogeneity or Heterogeneity of the population:

In this section we examine if young adult residents of Plex neighbourhoods perceive a diversity of people on a micro-scale in their neighbourhood, and if so, how do they feel about this diversity. The following comment is an example of the attitude toward homogeneity or heterogeneity of the population in Plex neighbourhoods:

"I think more young educated people are choosing these neighbourhoods to live in especially those who are cool. You know? [...] Well, here people they have different mind-sets than in suburbs. I think over there still people are more conservative about some issues but here I found people cool. Like if you are different than them or if you are living alone or you are gay or I don't know stuff like that. You feel comfortable because there are all kinds of people in the neighbourhood".³⁴

1-3-4. Human needs / Affiliation needs / Sense of being at home:

With regard to place identity as affiliation, in this section we explore whether residents are emotionally involved with their residential environment to the extent that they express a sense of being at home, feeling comfortable, familiar and really themselves in Plex built environments. An example of the sense of being at home within this context was expressed like this:

[...] Well after visiting all those apartments that I went to check, I found here and it feels home. I would love to have a bigger place, like my house in Boucherville, which has much more space but it is so far from everything and the neighbourhood was cold. It feels home here. It is cozy. This was a good choice for me".³⁵

³⁴ 43 years old- Male- 7 years of occupancy in the Plex environment.

³⁵ 32 years old- Female- 3 years of occupancy in the Plex environment.

1-4. Human needs / Esteem needs:

In this section, we try to recognize how a Plex environment reinforces the subjective sense of self-esteem of Gen Xers.

1-4-1. Human needs / Esteem needs / Status:

Lang (1994) illustrates that the prestige level of a neighbourhood is not merely the result of its architectural quality but also of the overall ambience that exists there. Such an ambience depends on the mix and nature of the activities that takes place there and the social status of people who are involved in those activities. In this section of our study, we explore how young adults perceive the Plex environment's ambience, the type and quality of homes, shops and other facilities, the symbolic ways in which the Plex environment monitors the social status and the lifestyle of people associated with it. The following is an example of the way esteem needs are perceived in terms of place status in a Plex neighbourhood context:

"[...] Well, people mostly are poor here, they are drunks on the streets, and they smoke pot. And there is the Douglas Hospital and there are a lot of people with mental issues here. You can see that in the street often. See a wired one and then it is just a part of the community, but I see a lot of changes, which is good for the neighbourhood, at least in the long term".³⁶

1-4-2. Human needs / Esteem needs / Privacy:

According to Lang (1994) one way of enriching people's self-esteem is through providing them with the privacy they seek or enabling them to attain it. Similarly, he

³⁶ 31 years old- Female- 5 years of occupancy in the Plex environment.

states that removing the opportunities for privacy reduces people's self-esteem. In this section, we examined the impact of living in a Plex environment on the level of privacy and the self-esteem of the young adult residents. Studying self-esteem needs with regards to the privacy needs of residents is typified in comments such as the following:

"Here, I have curtains to close whenever I feel [the need] to and I tried to keep conversations short specially with old ladies because they want to talk a lot and they want to know so much about you [...] Here sometimes people even noticed that oh there is a stranger at my porch. And they will later even ask about him, which is good and bad at the same time, I think".³⁷

1-5. Human needs / Self-Actualization needs:

Lang (1994) traces self-actualized people through the kind of home that they seek, the heritage awareness and aesthetic appreciation, which they express in their residential choices, and the way they pursue developing social relationships with other cultures and lifestyles in such an environment. Looking to the Lang (1994) model, in this section we examine the Plex buildings in response to the self-actualization needs of their young adult residents, both in terms of heritage awareness and also fulfilling social relationships within the neighbourhood.

1-5-1. Human needs / Self-Actualization needs / Heritage awareness:

Plex buildings are a unique symbol of Montréal's vernacular architecture, which are important to study in terms of heritage awareness and historical association. In this section we examine whether these neighbourhoods are able to awaken an interest in

³⁷ 33 years old- Female- 5 years of occupancy in the Plex environment.

the lives of those who lived there in the past. The beauty of the history beyond the space in the Plex environment and the pleasure of embodying the memories a century past for Gen Xers are a matter of concern in this section. The following is an example of the way interest is proposed in the historical heritage awareness of Plex environments:

*"[...] I like this flat because I like these old chandeliers. It is old like hell and I like this flat because I love the floors and the kitchen and you see everything is wood. And it looks beautiful, very bright, very natural and very nice. [...] And I think there were a lot of stories here. I just think that if I am cold right now, what did they do in that old time? And were they freezing all the time? How hard was it?"*³⁸

1-5-2. Human needs / Self-Actualization needs / Social life fulfilment:

This section explores how much Plex neighbourhoods provide an environment that brings people together into the social life of the neighbourhood, foster democratic values, and promote acceptance of other people as being who they are. Lang (1994) mentions these aspects to be as strong values of self-actualized people who are fulfilling their social life in their places, as typified in this resident's comment:

*"I think the social life is different here. People move in and they renovate their place and changed it to be more convenient to their lifestyle and the way they socialize with others and accept others, I think it is much more open-minded than some other traditional closed neighbourhood ghettos".*³⁹

³⁸ 43 years old- Male- 7 years of occupancy in the Plex environment.

³⁹ 39 years old- Female- 4 years of occupancy in the Plex environment.

1-6. Human needs / Cognitive needs:

In this section we examine whether the physical and social environment of Plex neighbourhoods is an appropriate context to explore new aspects of inner city urban life. It is also important to realize the way Gen Xers continue to learn about the vernacular architecture of the city and different cultures, lifestyles and behavioural settings inside these old established neighbourhoods.

1-6-1. Human needs / Cognitive needs / Experiencing and learning:

The everyday environment of the Plex neighbourhoods is important to study in terms of the informal learning opportunities and the participatory landscape, which they may offer. In this section, the goal is to discover Gen Xers life-experience within the density, diversity, and multiplicity of behavioural opportunities of Plex neighbourhoods. An example of how people meet their cognitive needs in Plex neighbourhoods is illustrated in the following comment:

"For me, it is a place where people are living very close together and they are handling each other very good. It is like this neighbourhood pushes them to be close. I think here we learn to accept each other. It is like my daycare when you put kids close together and they have to share things well, maybe at first there are some conflicts for sure but then step-by-step they learn to deal with each other".⁴⁰

⁴⁰ 31 years old- Female- 3 years of occupancy in the Plex environment.

1-6. Human needs / Aesthetic needs:

This category analyzes the Plex environment with regards to the aesthetic needs of the young adult residents in three different levels of formal, sensory and symbolic aesthetics.

1-7-1. Human needs / Aesthetic needs / Formal aesthetics:

The geometric character of the environment, the patterns, proportions, rhythms, balance points and even its very complexity creates a significant physical environment, which is mostly understood in terms of visual order. This section studies the formal aesthetic aspects of Plex neighbourhoods from a Gen Xers' point of view. The following is an example of dealing with the formal aesthetics in a Plex environment.

"Its architecture is special, the forms, the porch, the shape of the balconies in terms of transparency and spiral stairs, and I think the social life is different here. It looks old but I think the architecture is unique".⁴¹

1-7-2. Human needs / Aesthetic needs / Sensory aesthetics:

The possibility of having a poetic sensory experience related to the environment and a sensation of the pleasure that these places may provide for Gen Xers is examined in this section. Although much of these experiences are subconscious and depend on what we have been taught or have discovered, Plex neighbourhoods are examined in the way that they respond to the aesthetic preferences of their young adult residents.

⁴¹ 33 years old- Male- 3 years of occupancy in the Plex environment.

"[...] I really do enjoy making some coffee or taking some beers out on the balcony or reading a book or sometimes nothing, just watching people passing or on the other balconies and even having conversations with people who walk by on the sidewalk. I like this kind of space where there is no or little barrier to human interaction".⁴²

1-7-3. Human needs / Aesthetic needs / Symbolic aesthetics:

The symbolic meaning of the environment is not just about its fixed features but also about the people and objects that it contains. According to Lang (1994) the patterns that people choose or would like to choose for their homes are largely based on the associational meaning that those environments have for them. In this sub-section we examine the symbolic aesthetic value of the Plex built environment.

"[...] Well, My landlord had told me that it's a 110 year old building so it has that old feeling, which I absolutely love, and even in my bedroom and my roommat's bedroom we all have the original floors that belongs to 110 years ago. My closet door is antique. It belongs to 110 years ago. I love the whole nostalgic feel of this place".⁴³

1. Sense of place:

The concept of 'sense of place' has been discussed within different disciplines and encompasses diverse aspects. In this thesis, 'sense of place' is examined from two quite different aspects. The first aspect refers to the human-place dual relationships in terms of the ways that people relate to their physical place and the way that place impacts on people's behavioural patterns. The second aspect is focused on place attachment, which consists of the depth and the types of psychological and social

⁴² 38 years old- Male- 3 years of occupancy in the Plex environment.

⁴³ 35 years old- Female- 4 years of occupancy in the Plex environment.

bonds and attachments that people have with their particular physical place. Prior to analysing our findings, we will take a more in-depth look into the two separate but related aspects of sense of place, which are related to the social, psychological and physical needs of the residents relative to their environment.

2-1. Sense of place / Human (English-speaking young adult dwellers):

Our population study which here is referred to as young adults covering people born between 1961 and the late 1970s, that is roughly between 30 to 50 years old at the time of interview, as the base of our population study.

2-1-1. Sense of place / Human (English-speaking young adult dwellers) / Dweller's gender:

Both female and male groups of English-speaking young adults were interviewed. However, we tried to maintain the balance between the numbers of interviewees of the both genders.

2-1-2. Sense of place / Human (English-speaking young adult dwellers) / Dweller's age:

Dweller's age in this study defines the space of the participants as between 29 to 45 years old categorizing them into four distinct groups, with a 5-year age gap between each.

2-1-3. Sense of place / Human (English-speaking young adult dwellers) / Dweller's parental status:

In this level we divided the dwellers' parental status into three different groups, no children, 1 or 2 children, and 2 children and more.

2-1-4. Sense of place / Human (English-speaking young adult dwellers) / Dweller's job skills:

This section concerns the dweller's job skills, a scale which places them into 9 different categories of employment, professional, managerial, manual, service, creative, student, clerical, unemployed and retired.

2-1-5. Sense of place / Human (English-speaking young adult dwellers) / Dweller's Ownership:

While home ownership may change the bonds to a particular place, having a car or a pet could bring more common grounds of socializing between neighbours. Therefore, on this level the young adults patterns of ownership are a matter of interest.

2-1-6. Sense of place / Human (English-speaking young adult dwellers) / Dweller's tenancy status:

This study understands the variety of lifestyles and the loosened ties of the traditional concept of a nuclear family. Therefore, the population group of the study was chosen independently from their personal relationship status so we could observe the patterns of dependency and the strength of the individual bonds to the place in terms of young adults' tenancy status. We categorised this part into three different groups, the sole tenant, partner tenants and roommates.

2-1-7. Sense of place / Human (English-speaking young adult dwellers) / Dweller's length of residency:

The length of residency in a place is a very important factor in developing emotional bonds and an attachment to a place. In this section, we investigated the length of a dweller's residency in the Plex environment. This section is divided into four different groups; those who have lived in Plex neighbourhoods since childhood, under 3 years of residency, 3 to 5 years of residency and 5 years and more of residency.

2-1-8. Sense of place / Human (English-speaking young adult dwellers) / Dweller's previous residence type:

Each and every form of a residential environment has a distinct physical form, which promotes its own symbolic meanings and offers a particular context of individual and social experiences for residents. In this section we studied the previous types of young adults' residential buildings to understand their particular positive or negative spatial and social experiences. This section will later compare young adults' spatial and social experiences in Plex neighbourhoods. The previous residential types of young adults' residents are examined in four categories, single-family houses, condominiums, Plex buildings and other types of residence.

This is a resident's comment of an example of their individual and social experiences, in comparison to the Plex environment:

"I grew up in Boucherville. It was a house. It was completely different than here. My house was much bigger than here. I had two walk-in closets just in my bedroom, and I had my own bathroom in it too. There was a pool and there was a garden and I had parking. It was completely different. Over there, the socializing is very limited.

It is kind of my life your life. You keep your life away. I think the neighbourhood was cold. People were almost close in social class, but it was different. It was better and worse".⁴⁴

2-2. Sense of place / Place (Plex environment):

In this study the Plex environment is explored in the residential building's context, as well as in a neighbourhood settings scale. The concern is to explore the sense of place and patterns of attachment that start from the resident's private zones and develop to the more public milieu of the Plex environment.

2-2-1. Sense of place / Place (Plex environment) / Plex buildings (Flats):

To understand how people start feeling at home in a residential place and the ways in which emotional bonds and a sense of comfort develop, we need to have a general evaluation of the physical characteristics of that place. The focus of this section is on the main aspects of the Plex environment and its physical characteristics.

2-2-1-1. Sense of place / Place (Plex environment) / Plex buildings (Flats) / Flat type:

In this thesis flat type refers to the duplex and triplex kinds of Plex buildings. Each of these structures has their own architectural characteristics, which has been discussed in previous chapters.

⁴⁴ 37 years old- Female- 4 years of occupancy in the Plex environment.

2-2-1-2. Sense of place / Place (Plex environment) / Plex buildings (Flats) / Flat level:

In this section we investigated the storey (level) of the flat in which the respondent lives. The order of this category starts from the basement to the first floor, the second floor, and finally the third floor.

2-2-1-3. Sense of place / Place (Plex environment) / Plex buildings (Flats) / Flat renovation status:

The renovation status of a flat is important to study because it shows the way in which people adapt to the old established space of their unit as well as their practical appreciation towards the history and the heritage settings. In this section, there are three categories, dealings with non-renovated, partly renovated and fully renovated flats. This is an example of the way a tenant refers to the flat renovation status:

*"[...] We decided to renovate it completely but it was very expensive at the time, so we decided to start from the kitchen and the bathroom. So we renovated them completely, then we changed the floor, then we took that wall off and made the long hallway better. And well, we changed that bedroom over there to the living room. Yes, that's all we did. Oh, and then I didn't like those old doors so we changed them too. I think that it was a very good investment, although it costs a lot to renovate it all".*⁴⁵

2-2-1-4. Sense of place / Place (Plex environment) / Plex buildings (Flats) / Outdoor appendages (Transition zone usage):

⁴⁵ 38 years old- Female- 7 years of occupancy in the Plex environment.

The outdoor appendages of Plex buildings are crucial to this study as they provide the opportunities for socializing between neighbours while they improve the quality of the time Plex dwellers spend on their own privately. These outdoors appendages consist of back yards, front and back balconies, front porches, outside stairs, rear lanes and front access sidewalks. Part of these outdoor appendages such as rear lanes, front access sidewalks and outside stairs are shared spaces between neighbours and the public. The front porch, front balcony, back balcony and back yard have a private access. However, having a visual access to the public sphere reverses its private status to that of semi-private spaces. This Plex dweller's explanation is an example of how people perceive these transitional zones in their Plex residential building:

"[...] Well, here we share the backyard and part of the garage is for those on the second floor and the porch and the stairs of course. But we have our private balconies. On the porch or stairs we may meet and we will stop to talk. Oh, when we were on the first floor it was mostly at the yard. In summer lots of people are sitting on their porches or they are doing something on their balconies. Sometimes they are cleaning up in front of their properties and well you will see people in their balconies or back yards as well. It is less in the winter, of course, people are not talking so much because of the cold weather".⁴⁶

2-2-2. Sense of place / Place (Plex environment) / Plex neighbourhoods' liveability:

The term 'liveability' is used to evaluate the quality of life in a place with regard to its surrounding physical environment and location-based social settings. A variety of factors can impact the liveability of an environment. However safety, accessibility, affordability, attractiveness and social inclusiveness are mentioned as the most important aspects of the living conditions in a place (Namazi-Rad et al. 2012; Omuta, 1988; Cox, 1972).

⁴⁶ 33 years old- Female- 5 years of occupancy in the Plex environment.

The next part of our analysis is to observe the young adults' comprehensive evaluation of liveability in so-called Plex neighbourhoods.

2-2-2-1. Sense of place / Place (Plex environment) / Plex neighbourhoods' / Neighbourhood safety:

Neighbourhood safety is often a major concern of residents, both homeowners and tenants. In this section, we examine the perception of neighbourhood safety for young adult residents of traditional Plex neighbourhoods. This following comment is an excellent example of how much tenants find Plex neighbourhoods a safe place to live:

"It is safe and I have a good feeling to live here. It is not dangerous at all to walk in the night. There are some more dangerous neighbourhoods in Montréal. Well, there is no place in the neighbourhood that I would avoid going to. Some places are dirty and if I don't like them it is not because they are not safe zones, it's just because of the mess, I don't go there. There is no street that is really dangerous, its just gross and you don't want to go. That's it. The only thing for me is that here you come out of your house and you are right in the street so it is like a passing street, it would be a little dangerous especially for kids, I think and because most people who live there don't have really full access to their backyards, it is kind of closed to them, so their kids play more on the street which is not good".⁴⁷

2-2-2-2. Sense of place / Place (Plex environment) / Plex neighbourhoods' / Convenience accessibility:

This section analyzes the 'convenience accessibility' of Plex neighbourhoods in six categories; public transport system, bicycle routes, nearby parks and open spaces, sidewalks throughout the neighbourhood, walking distance to shopping areas and walking distance to community services.

⁴⁷ 31 years old- Female- 3 years of occupancy in the Plex environment.

A local tenant puts the convenience accessibility of Plex neighbourhoods in the context below:

*“[...] Here within walking distance we have all the shopping stores and groceries and that was very important for us when we were looking for a place to rent. We didn’t want to drive for every little thing we wanted to do. So it is nice that most of our things we can do by walk, like walk to work, take a bike to work, I like to take the bike downtown, all the groceries, bakeries, even the daycare is so close by”.*⁴⁸

2-2-2-3. Sense of place / Place (Plex environment) / Plex neighbourhoods’ / Attractiveness:

In this section the attractiveness of Plex neighbourhoods is explored within the streetscape of the Plex environment, as well as the distinct architectural characteristics of Plex buildings.

2-2-2-3-1. Sense of place / Place (Plex environment) / Plex neighbourhoods’ / Attractiveness / Streetscape:

In this level the streetscape and the Plex ambiance help explain the way young adults’ observe the human scale, cleanliness, street lighting, natural settings, and walking friendly patterns in the Plex neighbourhoods. This is an example of the way a resident describes the Plex streetscape:

“[...] And I like the neighbourhood, because Wellington has lots of cafes, good variety of grocery stores, like Asian grocery stores, Mediterranean and the IGA. It is important for me to have all different products I like, good bakery. I like to go out and see busy streets where different people come and go.

⁴⁸ 37 years old- Female- 4 years of occupancy in the Plex environment.

*I have different cultures around me and I like it. And it is safe. You could walk any time during the night and the streets have good lighting at night so you don't feel that you are walking in an empty dark street [...]"*⁴⁹

2-2-2-3-2. Sense of place / Place (Plex environment) / Plex neighbourhoods' / Attractiveness / Distinct architectural character (Montréal vernacular architecture):

In this sub-section we aim to understand how significant Plex buildings are for the young adult residents as a symbol of Montréal's vernacular architecture. Although some people might not be familiar with the historical origin and the heritage aspect of these buildings, in this part of our analysis we were looking at the ways that these old established residences could be more attractive for people. This is an example of how a typical resident understood Plex buildings' symbolic forms:

*"A Plex for me? I don't know. It is a building, which has history, identity, and memory. It is a significant character of Montréal I think. If you visit different neighbourhoods you will probably find a Plex in most of the streets. It has a staircase mostly spiral and it has balconies and it has life. It is a live neighbourhood. Yes we have balconies in condos too but it is different. Here is like there is an invisible wire between my balcony and other neighbours. I don't know why it never happens for me anywhere else"*⁵⁰

2-2-2-4. Sense of place / Place (Plex environment) / Plex neighbourhoods' / Social inclusiveness:

According to Namazi-Rad et al. (2012) one of the main aspects in evaluating neighbourhood liveability is through observing its social inclusiveness and the

⁴⁹ 39 years old- Female- 4 years of occupancy in the Plex environment.

⁵⁰ 35 years old- Female- 8 years of occupancy in the Plex environment.

strength of the social life inside it. Cultural diversity, friendliness and social bonds in the neighbourhood are the main factors, which bring social warmth and activeness in local environments.

2-2-2-4-1. Sense of place / Place (Plex environment) / Plex neighbourhoods' / Cultural diversity:

Living within a culturally diverse environment can be a fulfilling and an enlightening experience. The residents of multicultural neighbourhoods can achieve a deeper understanding of other cultures and values that live by their side. Such cultural awareness improves residents' level of respect and appreciation of the cultures and people from other parts of the world. Meanwhile their exposure to other cultures and values may that their tolerance and understanding towards cultural differences gets enhanced. The following comment is an example of how young adults understood cultural differences in a Plex environment:

"[...] Well, it is nothing very special about the lifestyle here. It is just the way people behave. People move in and move out so easily and they don't panic about a new one who just walks in. Here your neighbour could be a black or a gay or a Chinese or a university professor or a plumber or three students living together in a flat or whatever. Here you feel the freedom. You are what you are and you are happy with that and this culture should be everywhere in Montréal because we are living in a multicultural city, for God's sake".⁵¹

2-2-2-4-1. Sense of place / Place (Plex environment) / Plex neighbourhoods' / Neighbourhood friendliness and social bonds:

The level of friendliness in between neighbours and their approach in promoting social networks is explored in this sub-section. This section explores whether

⁵¹ 37 years old- Female- 5 years of occupancy in the Plex environment.

gathering together to relax, recreate, or enjoy the shared space of Plex buildings can form social bonds in between the Gen Xers and other groups of residents. The following is an example of the way a resident perceives friendliness in Plex neighbourhoods.

"[...] One thing I can be sure of is that the people here are very friendly. They are more integrated into community-based relations. They like social networking. They like to get closer in some ways. In my previous condo, I never felt like that. Even though we had a swimming pool over there people never chitchat. If we have a swimming pool here oh, I think after years we will have pool parties everywhere [laughing]".⁵²

2-3. Sense of place / Human - Place relationships:

This section investigates the ways that young adult residents relate to the Plex environment and the types of emotional bonds that they have with their neighbourhoods. The first part of this category is a revised version of Altman and Low's (1992) which describes three main kinds of human related bonds to a physical place. These bonds are biographical (familial or historical bonds), commodified (cognitive bonds within volunteer mobility), and dependent (on a person or economic pattern). In the next part we evaluate the place satisfaction of young adult residents in Plex neighbourhoods. Then the acculturation process in Plex environments and the changes on the variety of social and personal behavioural settings are investigated. This section finishes with the estimation of the place aspiration of young adults. The goal is to verify whether these groups refer to the old established neighbourhoods of Plexes as one of their future residency options.

⁵² 35 years old- Female- 3 years of occupancy in the Plex environment.

2-3-1. Sense of place / Human - Place relationships / Biographical (Familial or historical bonds):

Altman and Low (1992) describe biographical relationships as the strongest and most enduring human-place relationships based on the residents' personal and family history with a place. These kinds of human-place relationships are characterized by a strong sense of identification with a place and a relatively long period of residence there. In this section, the impact of the personal history of young adult residents over times and the relationships they develop within the Plex environment are further explored. The population studied in this section are those who were either born in the old established Plex neighbourhoods of Verdun or those who have been living there for a long span of time. This resident's comment is an example of biographical relationships:

"Well, I was born here. I know Verdun like the corner of my pocket. We are Verdunites, you know? I have my family here, all my memories. And I am staying here not because I can't afford another place but because I don't want to leave it. It is my place [laughing]".⁵³

2-3-2. Sense of place / Human - Place relationships / Commodified (Cognitive bonds within volunteer mobility):

In this section we track the patterns of the voluntary mobility decision-making process of young adults in choosing a Plex environment. Commodified relationships as Altman and Low (1992) suggest are typically a direct result from the dissatisfaction with one place and the quest to find a more desirable environment. This relationship is based on the comparison between the attributes of a place and what a person believes as ideal attributes. In this section, we emphasize the best possible combination of

⁵³ 43 years old- Male- 43 years of occupancy in the Plex environment.

desirable features that young adults find in a Plex environment as their optimal residential choice. The voluntary residential mobility of young adults is mainly analyzed within three considerations; affordability, perception of safety and locational characteristics of Plex neighbourhoods.

2-3-2-1. Sense of place / Human - Place relationships / Commodified (Cognitive bonds within voluntary mobility) / Affordability:

In this sub-category we look into the affordability of the Plex units for the section of the society whose income may be about or below the average household income. The cost of living in Plex neighbourhoods, the affordability of the neighbourhood amenities and the socioeconomic status of Plex residents' is investigated in this subsection. This resident's comment is an example of the discussion on the affordability of Plex neighbourhoods:

*"I think a place like this in the Plateau would cost me my life to pay [for it]. It is cheap here. So [it] depends on what you need and how much you want to pay, you can find reasonable prices. The same place in some other parts of Montréal, maybe would cost at least 400 \$ more than here [...]"*⁵⁴

2-3-2-2. Sense of place / Human - Place relationships / Commodified (Cognitive bonds within voluntary mobility) / Safety perception:

The strength of a feeling of safety for young adults in Plex neighbourhoods is explained here. Safety perception is one of the main factors in the mobility decision-making process and preferred neighbourhood characteristics.

⁵⁴ 33 years old- Male- 4 years of occupancy in the Plex environment.

"Well, before coming here, our friends told us that Verdun is not that much safe, because there are a lot of poor families still living in the neighbourhood and they said people could break in to your place so easily like through balconies. But after living here for a while I think people were wrong. Yes, the lifestyle is very different to what my parents were used to for instance but I think we like this lifestyle more and I never hear something happens to our neighbours".⁵⁵

2-3-2-3. Sense of place / Human - Place relationships / Commodified (Cognitive bonds within volunteer mobility) / Locational Characteristics:

Locational characteristics of a place play an important role in the voluntary mobility process of decision-making. When people consider moving to a new place, they look for easy access to the public transport services, or an easy access to their jobs, or schools. Montréal's downtown is the heart of the city, which is not just an important zone for commercial developers and professional recruitment, but also where the arts and culture thrive. This zone still appears to be important to many residents in terms of facilities and activities. Therefore, as a part of the Plex neighbourhood's locational characteristics we examine the access to Montréal's downtown as a factor in voluntary mobility decision-making. This is a residential example of investigating locational characteristics on young adults mobility decision-making:

"[...] You know, when I was in Laval I needed to take a car to go buy a gallon of milk but here you just walk a ways and you will have everything. Verdun is very easy to reach. It has three metros here. And it is 10 minutes from downtown. It's not far. So if you don't have a car you can go to do shopping by bus or you can take a metro to downtown. I like to have that accessibility to everything".⁵⁶

⁵⁵ 32 years old- Female- 4 years of occupancy in the Plex environment.

⁵⁶ 41 years old- Female- 4 years of occupancy in the Plex environment.

2-3-3. Sense of place / Human - Place relationships / Dependent:

The dependent types of living relationships come about in general as a result of having either no choice or having severe limitations on choice. In this section, we explore the sense of place for those groups of young adult residents who chose Plex neighbourhoods because of their personal economic restrictions or in order to be living with a partner. Although this group may have made a conscious choice at the time of moving, it is important to note that Plex neighbourhoods were not their personal choice of residency.

2-3-3-1. Sense of place / Human - Place relationships / Dependent / Economic restrictions:

The patterns of emotional bonds to the place for those who moved in as a result of economic restrictions are explored in this section. An example of such a situation is illustrated in the following comment:

"[...] Well, I'm a mechanical engineer but I got laid off and now it is almost three months that I am looking for a job. With all these problems I think the amount of money I am paying now for rent is reasonable and it is very cheap. And I am totally happy because I don't have to pay a lot of money for rent".⁵⁷

2-3-3-2. Sense of place / Human - Place relationships / Dependent / Dependency on a person:

In this section, we explore those young adults who moved to Plex neighbourhoods to join their partners and to live with them. It is important to study whether dependency

⁵⁷ 42 years old- Male- 3 years of occupancy in the Plex environment.

on a person impacts their developing a sense of place in Plex environment. Moreover, this section compares the emotional bonds to the communities within Plex neighbourhoods to those places in which young adults have lived in the past. An example of such an approach is illustrated in the following comment:

“I moved in with my boyfriend and his daughter. There are some people I see at church and two families we took a tour to Gatineau with last summer. We knew each other since my boy friends’ daughter is a friend with their daughter. But sometimes I miss my own place in Sherbrooke. The quality of the place is much better than here, but well, my boyfriend’s daughter goes to school here and she wants to be close to her mom too, so for now I have no other choice”.⁵⁸

2-3-3-2. Sense of place / Human - Place relationships / Dependent / Job related obligations:

There are some people who choose a residential place to live as a result of job related obligations. Although, this group may relocate to a more ideal place to live if they had a chance, it is still important to understand their sense of place towards their present residential place. In this section, we investigated whether job related obligations is a reason for young adult residents to choose Plex neighbourhoods and if so how much they have established emotional and social bonds towards their environment.

2-3-4. Sense of place / Human - Place relationships / Place satisfaction:

This section investigates the levels of the young adult resident’s satisfaction and examines whether this group of residents is satisfied, proportionally satisfied or totally unsatisfied with Plex neighbourhoods. Below is an example of how a young adult discusses their level of satisfaction in a Plex neighbourhood:

⁵⁸ 38 years old- Female- 5 years of occupancy in the Plex environment.

"[...] Oh, we love it here. We always try to sell it to our friends. The only thing we missed here is our friends because none of our friends live here. We have everything we need and with such a good price where else I would like to be? Yes, I think both me and my husband are very satisfied to move here".⁵⁹

2-3-5. Sense of place / Human - Place relationships / Adaptation to a new lifestyle:

In this section, we investigated the dominant cultural and psychological settings in Plex neighbourhoods that may impact on young adult residents' mutual adaptation with the space. We looked at this adaptation in terms of it being a dual process of cultural and psychological change that takes place through contact between the Plex residents and the lifestyle that this particular environment offers. The patterns of adaptation in Plex neighbourhoods have to be seen through the contact frequency, casual contacts, and developed tolerance and attitudinal changes among young adult residents.

2-3-5-1. Sense of place / Human - Place relationships / Acculturation / Contact frequency:

The shared space, proximity and the visual access that a Plex environment offers, could provide a frequency of contacts which is different from the contact overloads of high-rise buildings and the limited contact numbers found in single-family housing environments. In this section, we examine the young adult residents' adaptation to the contact frequency that Plex environments deliver. An example of adaptation to the Plex contact frequency is well put by a resident in this comment:

⁵⁹ 35 years old- Female- 3 years of occupancy in the Plex environment.

"[...] Here, you rarely go out and don't get caught by neighbours [laughing] but it is a part of the culture here. Each part of the city I think has its own character and here the character is to meet your neighbours often when you are out or they are out in the summer. The problem is that some people are troublemakers, so if you are not lucky enough and they happened to be your neighbours, social contact with them could be a source of conflict and problems all the time. And sometimes you don't feel to talk with people but they are there and you have to be able to politely skip them".⁶⁰

2-3-5-2. Sense of place / Human - Place relationships / Adaptation to a new lifestyle / Casual contacts:

Adaptation to casual contacts is one of the aspects of living in Plex buildings. These kinds of contacts are a part of life, especially in the summer when the neighbours are using their balconies, backyards and porches. In this section, we examine how much young adult residents of Plex neighbourhoods are adapting to these kinds of contacts in their surrounding environment. A good example of the way that they describe casual contacts in Plex neighbourhoods is reflected in the following comment:

"I don't like to have open social contacts with strangers. I mean if you know people, you may stop to say hi or chit chat, but if there is just a pedestrian passing by I don't feel comfortable. If you know somebody, that's ok, but it is not easy to start that kind of social contact with strangers from the middle of nowhere. But it is funny here, I see sometimes they really don't know you but they go waving hi or bye and it's something I can't get used to".⁶¹

2-3-5-3. Sense of place / Human - Place relationships / Adaptation to a new lifestyle / Tolerance behavioural change:

⁶⁰ 33 years old- Male- 3 years of occupancy in the Plex environment.

⁶¹ 39 years old- Male- 4 years of occupancy in the Plex environment.

In this section we traced the impact of living in Plex neighbourhoods and their specific social fabric on the changing of tolerance behaviour of the young adult residents. Here, is an example of tolerance behavioural change for young adults:

*"[...] Me and my neighbours have so many times problems. I mean I have complaints for their loudness and it is disturbing, but no police involved. I knocked on their door and told them to be quiet but still lots of problems. But you know, I can't call the police. Not like I can't, but I don't want to. Well, we are neighbours. We are living here together and it is not nice to do so".*⁶²

2-3-5-4. Sense of place / Human - Place relationships / Adaptation to a new lifestyle / Privacy maintaining behavioural change:

In this section, the semi-public, semi-private spaces of the Plex environment are examined to see whether the privacy maintaining behavioural changes among young adult residents of Plex neighbourhoods compares to their spatial experiences in other residential places.

*"Well, in the summer the trees are full you have complete privacy in the back. I preferred to be in talkless balconies sometimes. In the balcony here you definitely are facing your neighbours but that does not bother me. But it depends on your cultural values too. Look, our neighbours on the second floor, they have a shade screen on their balcony because his wife does not feel comfortable; well she has a hijab and it is like they have a wall, so people can't see them when they are out but for me I don't mind".*⁶³

2-3-6. Sense of place / Human - Place relationships / Plex environment aspirations:

⁶² 33 years old- Female- 5 years of occupancy in the Plex environment.

⁶³ 37 years old- Female- 37 years of occupancy in the Plex environment.

Lupton & Kintrea (2011) state that aspirations are distinguishable from expectations. There is a difference between what people hope to achieve and what they expect to achieve. In this section we examine whether the young adult residents aspire to stay in a Plex environment for an extended period of time. This section has four sub-categories to explore the strength of Plex residents' aspirations. In the first section we study the strongest level of satisfaction of young adults for Plex neighbourhoods and those who will continue their residency in Plex buildings. The next section explores those who desire to leave the Plex environment but there is some dependent restriction, which keeps them in place. The third sub-section indicates those who will live anywhere that looks ideal. This group may show no significant aspiration toward the Plex neighbourhoods and are ready to leave at any time that they find a more convenient place to live. The last sub-section reflects those who have no specific place-preferences between living in Plex neighbourhoods or elsewhere. An example of a Plex environment aspiration with no specific place-preference is commented on by a resident as noted below:

"We are tired of moving so we would like to stay here for a while. We are thinking about having another child maybe in the next few years and it would be a little bit small for us. But we have everything we need around us. Well, if we could have a bigger place, why not, but it all depends on our jobs and our saving too. But to be fair Verdun is a good place. We are looking to buy something later, a duplex to flip".⁶⁴

2-4. Place attachment:

This category is structured based on Hummon (1992) four distinct levels of attachment, the rootedness (strong attachment), relativity (variable attachment), place alienation (weak attachment) and placelessness (no attachment). However, to identify the rootedness in a Plex neighbourhood this thesis used Scannell & Gifford's (2010)

⁶⁴ 35 years old- Female- 5 years of occupancy in the Plex environment.

three-dimensional model that contains person-based, place-based and psychological processes aspects.

2-4-1. Place attachments / Rootedness (Strong attachment):

Developing a sense of place and place identity towards a place leads people to foster a higher level of more complex relationships with 'place' a phenomenon termed 'rootedness'. According to Hummon (1992) long residence, social belonging, involvement in community, social activities and organizations indicate that people don't have to be born in a place to become a part of it. Using the Scannell & Gifford (2010) model of attachment, the goal of this section is to explore whether young adults are attached to the Plex environment personally, as a result of the Plex's significant ambiance or in terms of psychological patterns. To make this part clearer we will bring some examples.

2-4-1-1. Place attachments / Rootedness (Strong attachment) / Person-based attachment:

This section explores the young adults' personal and group connections to the Plex environment. These connections are studied in terms of their memories, shared experiences, values and symbols. An example of person-based attachment is contained in the following comment:

"[...] I have all of my family and also my close friends living here. Why do I have to be far from them and spend so much time and money on commuting every time we want to meet? And my parents need me to be here, I am the only child. So it was better for me to come and live here and I don't feel that I have a landlord here".⁶⁵

⁶⁵ 35 years old- Female- 5 years of occupancy in the Plex environment.

2-4-1-2. Place attachments / Rootedness (Strong attachment) / Place-based attachment:

Place-based attachment of Plex neighbourhoods is investigated in this section both in the context of the Plex built environment and its socially constructed version of 'place'.

2-4-1-2-1. Place attachments / Rootedness (Strong attachment) / Place-based attachment / Physical dimensions:

In this sub-section we explore how far the physical characteristics of Plex neighbourhoods could be at the center of an attachment for young adult residents of this environment. This is in order to foster a greater understanding of the extent that people express their willingness to substitute their residential place for another. An example of place-based attachment is typified in this comment:

*"I like this place so much and if I had money enough to buy and renovate it, I absolutely wish to do it. I think Plex is a particular kind of architecture. I mean a symbolic part of the city [...] It is a mixture of history, architecture, beauty, memory and people, for me and I am proud to live here. It feels good."*⁶⁶

2-4-1-2-2. Place attachments / Rootedness (Strong attachment) / Place-based attachment / Social dimensions:

According to Scannell & Gifford (2010) people are more attached to places that facilitate social relationships and group identity. In this sub-section the concern is about the social interactions that Plex neighbourhoods offer and the way it could

⁶⁶ 39 years old- Male- 5 years of occupancy in the Plex environment.

affect the intensity of place attachment for young adult residents. Here is an example of how a young adult explains the social dimensions of their attachment to the Plex environment:

"I came here alone so I didn't know people at the time. I am not from here, so, socializing was very hard for me. Now after three years it is obvious that I know people quit well. As an Anglophone who was born in Montréal, I have to say that here people are more open to English speakers than some other neighbourhoods. So I found my experience here to be much more positive for landing opportunities that create that sense of community that I like to have in my place. I like it here. It is like you belong to a larger family than your biological family".⁶⁷

2-4-1-3. Place attachments / Rootedness (Strong attachment) / Psychological process:

In this sub-category we examined the ways in which the Plex environment becomes important for young adult residents. This process consists of building, developing and maintaining emotional bonds such as a sense of belonging or sets of cognitions that turns to memories, values and preferences or behavioural patterns like proximity-maintaining as well as territorial behavioural identification.

"I like that I know my neighbours. It has a sense of knowing where you are, a sense of familiarity. And even more importantly, if you are not there, they know you are not, they look out for your apartment and you look out for their house so everybody is sort of looking after each other. In a sense they may not bring soup if you are ill but they look after the people's property and I guess it makes me feel secure and good".⁶⁸

⁶⁷ 36 years old- Female- 3 years of occupancy in the Plex environment.

⁶⁸ 39 years old- Female- 39 years of occupancy in the Plex environment.

2-4-2. Place attachments / Relativity (variable attachment):

In this section we examine place attachment of Plex neighbourhoods among highly mobile groups of young adult residents who can develop a sense of home wherever they decide to live. These groups of young adults have a mobile sense of home and are not strongly rooted to any particular community. Here, the objective is to explore whether a Plex environment could foster stronger emotional bonds for this group to keep them maintaining their residence for a longer period of time.

"I think it is good to move after spending a couple of years in one place. You will have different experiences of life here and there. Like in a high-rise I will have a view of the city for example and then for a few years I would like eventually to go move to a house so I can do whatever I want there in terms of having a bigger place, barbecue, gardening, redesigning. Here, you are renting a place, you are always in a need to have permission of your landlord to be able to do those kinds of modifications".⁶⁹

2-4-3. Place attachments / Place alienation (weak attachment):

This section explores the Plex environment according to those who may dislike it or are looking for a chance to leave it. In this section, we analyse whether or not the Plex physical and social contexts were a reason for weak attachment or if there are any other particular reasons for place alienation of young adults in Plex neighbourhoods⁷⁰.

⁶⁹ 34 years old- Male- 3 years of occupancy in the Plex environment.

⁷⁰ None of the participants in this study express place alienation toward Plex neighbourhoods.

2-4-4. Place attachments / Placelessness (no attachment):

This section studies those groups of young adults who do not express a place-based sense of home and have a lack of both place-based identification and emotional attachments to any residential environment, which in this study refers to Plex neighbourhoods.

"I've lived in a lot of different places. Different apartments [...] they were in different places of the city. They were not enough for me. I never felt at home in any of them. I don't feel at home easily, Well I have gypsy genes maybe, I'm like that".⁷¹

⁷¹ 39 years old- Male- 3 years of occupancy in the Plex environment.

Nodes

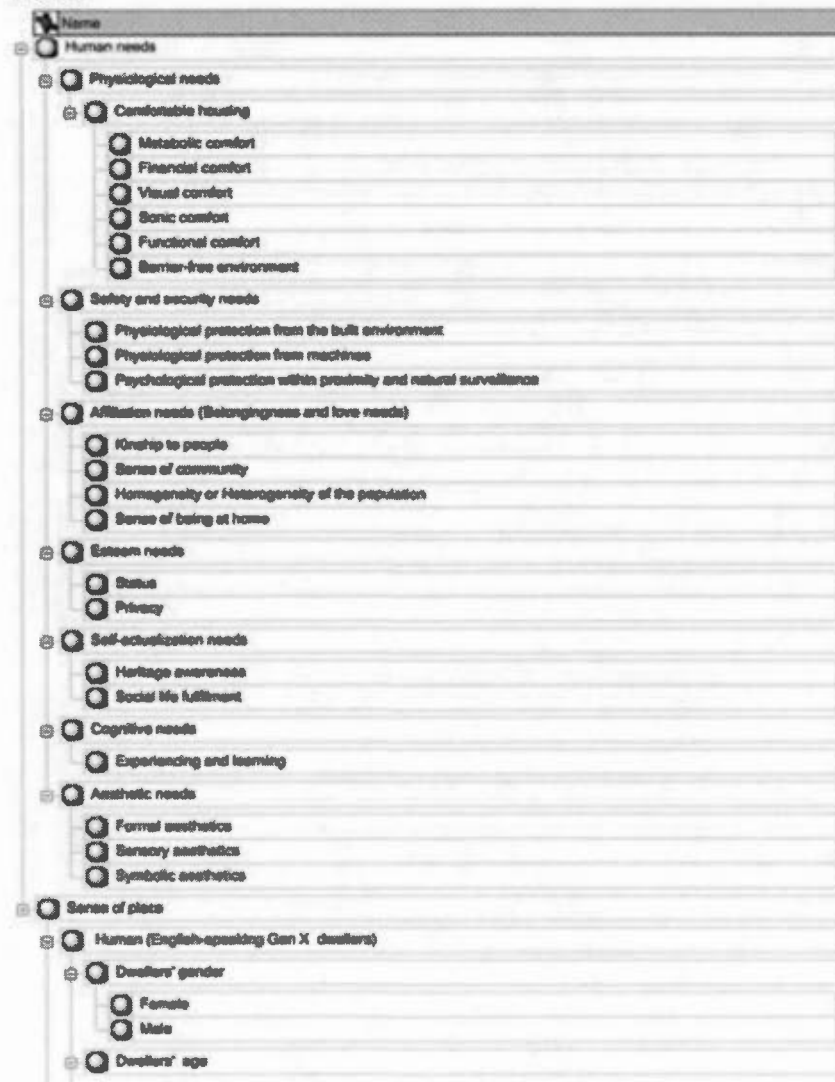


Figure 5.4 NVivo Nodes

continued on the next page...

Nodes

Name
<input type="radio"/> 30-35
<input type="radio"/> 35-40
<input type="radio"/> 40-45
<input type="radio"/> 45-50
<input type="checkbox"/> Dwellers' parental status
<input type="radio"/> No children
<input type="radio"/> 1-2 Children
<input type="radio"/> 2 Children and more
<input type="checkbox"/> Dwellers' job skills
<input type="radio"/> Professional skills
<input type="radio"/> Managerial skills
<input type="radio"/> Manual skills
<input type="radio"/> Service
<input type="radio"/> Creative skills
<input type="radio"/> Student
<input type="radio"/> Clerical
<input type="radio"/> Unemployed
<input type="radio"/> Retired
<input type="checkbox"/> Dwellers' Ownership
<input type="radio"/> Home ownership
<input type="radio"/> Car ownership
<input type="radio"/> Pet ownership
<input type="checkbox"/> Dwellers' tenancy status
<input type="radio"/> Sole tenant
<input type="radio"/> Partner tenants
<input type="radio"/> Roommate tenants
<input type="checkbox"/> Dwellers' length of residency
<input type="radio"/> Since childhood
<input type="radio"/> Under 3 years
<input type="radio"/> 3 to 5 years
<input type="radio"/> 5 years and more
<input type="checkbox"/> Dwellers' previous residence type
<input type="radio"/> Single family house
<input type="radio"/> Condominium
<input type="radio"/> Plex buildings
<input type="radio"/> Other types of dwellings
<input type="checkbox"/> Place (Plex environment)
<input type="checkbox"/> Plex buildings (Flats)

continued on the next page...

Nodes

Name
<input type="checkbox"/> Flat type
<input type="checkbox"/> Duplex
<input type="checkbox"/> Triplex
<input type="checkbox"/> Flat level
<input type="checkbox"/> Basement
<input type="checkbox"/> First floor
<input type="checkbox"/> Second floor
<input type="checkbox"/> Third floor
<input type="checkbox"/> Flat renovation status
<input type="checkbox"/> Non-renovated
<input type="checkbox"/> Partly-renovated
<input type="checkbox"/> Fully-renovated
<input type="checkbox"/> Outdoor appendages (Transition zone usage)
<input type="checkbox"/> Back yard
<input type="checkbox"/> Front porch (gallery)
<input type="checkbox"/> Front balcony
<input type="checkbox"/> Back balcony
<input type="checkbox"/> Outside stairs
<input type="checkbox"/> Rear lane (Alley-Ruelle)
<input type="checkbox"/> Front access sidewalk
<input type="checkbox"/> Plex neighborhoods Liveability
<input type="checkbox"/> Neighborhood safety
<input type="checkbox"/> Convenience accessibility
<input type="checkbox"/> Public transport system
<input type="checkbox"/> Bicycle routes
<input type="checkbox"/> Nearby parks and open spaces
<input type="checkbox"/> Sidewalks throughout the neighborhood
<input type="checkbox"/> Walking distance shopping areas
<input type="checkbox"/> Walking distance community services
<input type="checkbox"/> Attractiveness
<input type="checkbox"/> Streetscape
<input type="checkbox"/> Distinct architectural character (Montreal vernacular architecture)
<input type="checkbox"/> Social inclusiveness
<input type="checkbox"/> Cultural diversity
<input type="checkbox"/> Neighborhood friendliness and social bonds
<input type="checkbox"/> Human-Place relationship
<input type="checkbox"/> Biographical (Familial or historical bonds)

continued on the next page...

Nodes

Name	
<input type="checkbox"/> Commodified (Cognitive bonds within volunteer mobility)	
<input type="checkbox"/> Affordability	
<input type="checkbox"/> Safety perception	
<input type="checkbox"/> Locational Characteristics	
<input type="checkbox"/> Easy access to the public transport services (Metro or bus)	
<input type="checkbox"/> Easy access to downtown (symbolic heart of the city)	
<input type="checkbox"/> Easy access to work or school	
<input type="checkbox"/> Dependent	
<input type="checkbox"/> Economic restrictions	
<input type="checkbox"/> Dependency on a person	
<input type="checkbox"/> Job related obligations	
<input type="checkbox"/> Place satisfaction	
<input type="checkbox"/> Satisfied	
<input type="checkbox"/> Proportionally satisfied	
<input type="checkbox"/> Unsatisfied	
<input type="checkbox"/> Acculturation to a new lifestyle	
<input type="checkbox"/> Contact frequency	
<input type="checkbox"/> Casual contacts	
<input type="checkbox"/> Tolerance behavioral changing	
<input type="checkbox"/> Privacy behavioral changing	
<input type="checkbox"/> Place environment aspirations	
<input type="checkbox"/> To continue residency	
<input type="checkbox"/> Desire to leave but unable	
<input type="checkbox"/> To live anywhere that looks ideal	
<input type="checkbox"/> No specific place- preferences	
<input type="checkbox"/> Place attachment	
<input type="checkbox"/> Rootedness (strong attachment)	
<input type="checkbox"/> Person-based attachment	
<input type="checkbox"/> Place-based attachment	
<input type="checkbox"/> Physical dimensions	
<input type="checkbox"/> Social dimensions	
<input type="checkbox"/> psychological process	
<input type="checkbox"/> Relativity (variable attachment)	
<input type="checkbox"/> Place alienation (weak attachment)	
<input type="checkbox"/> Placelessness (no attachment)	

CHAPTER VI

THE PLEX: A VERNACULAR ARCHITECTURE TO LIVE IN

There is an evolving relationship with the social and cultural realms of the occupants and their built environment (Altman, 1992). However, the term 'place attachment' indicates that the primary center of people's emotional bond involves their built environment.

The overall aim of this chapter is to investigate the richness of the Plex buildings in terms of satisfying the human spatial needs. Furthermore, deriving from our theoretical framework (Alexander, 1980; Alexander *et al.*, 1977; Lynch, 1970), we will conceptualize the notion of 'sense of place' in the Plexs' physical environment based on what is perceived and the way it is perceived. This approach includes not only the physical features of the Plex buildings but also the human actions that may be in place, which constructed the character and the heightened sense of locale within the Plex environment. Examining the layers of young adults' possible relationships to the Plex's physical form had not been investigated before in a qualitative manner. In this chapter we put forward analyses of this phenomenon in three separate yet related themes. Many of the elements of the arguments of our analysis are liberally illustrated with verbatim quotes from the qualitative interviews conducted.⁷²

As we explained in Chapter three, the persons with higher levels of satisfaction have demonstrated greater patterns of 'place attachment', which leaves them less willing to

⁷² The arguments of our analysis are copiously illustrated with verbatim quotes from the interviews. In the interview excerpts, a dash – or an ellipsis...signals a pause in speech, an ellipsis in brackets [...] indicates an omitted section of speech, [word in brackets] are estimates of hard-to-hear speech. Bold phrases are my own emphasis and serve to highlight a particular point in the excerpt.

substitute their place of residence for another. The first theme of this chapter is to review the levels of residential satisfaction among young adult residents of Plex buildings. This theme explores the satisfaction of Gen Xers' spatial needs interlinked with the stimulation, the quality of transitional spaces, and also the size and scale of Plex buildings. It addresses the notion of comfortable housing from both the physiological and psychological perspectives. In this chapter, we investigate the metabolic and sonic comfort levels of Plex buildings and the question of barrier-free environments with specific attention paid to their accessibility and affordability. Within this, we examine the 'sense of being' at home in the Plex building particularly for young adult residents. Furthermore, we pay attention to the notion of residential safety and security with specific attention to young adults' watchfulness of the street and their approach to what Jane Jacobs (1961) quotes as 'eyes on the street'.

The next theme of this chapter examines the heritage awareness of young adults in the old established Plex neighbourhoods. The goal of this theme is to understand how young adult residents of Plex neighbourhoods are undergoing a redefinition and reinterpretation of the memories of past experiences and their historical association of residency. Within the context of Plex historic neighbourhood environments, we targeted the layers of these evolving traditional forms of architecture and their influence on the 'sense of place' and the symbolic values young adults find and appreciate in them.

The third theme examines the aesthetic features of the Plex environment. These observations apply not only to the physical characteristics of the Plex environment for shape the individual perceptions of formal beauty but also to examine its potential to provide the necessary sensory and symbolic aesthetic effects in adequate response to the aesthetic needs of the young adult residents. This theme

finishes with a discussion of the concept of 'imageability' of Plex buildings and the corresponding potential attractiveness of this type of architecture on creating mental image and promoting 'place identity' for young adult residents.

To have a better understanding of the patterns of peoples' perceptions and interactions according to their residential places, it is important to define the term 'environment'. The most common use of the term 'environment' refers to the biological surroundings of people. However, the environment of people consists of their whole surroundings, natural and artificial, which together are the major determinants in asserting one's quality of life. By this means, the built environment suggests having four interlocking components. These are the terrestrial, the animate, the social and the cultural ones (Lang, 1994).

The 'terrestrial environment' refers to the nature of the structure and the physical settings of the built environment. The 'animate environment' refers to those who occupy the built milieu. The 'social environment' suggests the relationships among people while the 'cultural environment' indicates the broader behavioural norms of a society and the atmosphere created by it. However, the distinction between the social and the cultural environment is a blurred one and it is suggested to consider them as one multi-faceted environment (Lang, 1994). In this thesis, to explore phenomena which relate to the Plex environment, we consider the physically built structure, the inhabitants and the social milieu of the place together as a whole.

6.1 The Plex's physical form and young adults' residential satisfaction:

In Chapter three, we refer to a number of psychological theories in which human beings seem to be driven by varied fundamental yet personal internal motivations and needs. Human motivations and needs are not only dependent on personality and culture but also continue evolving with experience in different times and situations. The central role of motivations and needs in human behaviour makes it inescapable to do any reasonable analysis of human-place relationships without identifying this dominant influence. As acknowledged by Lang (1994) and Maslow (1954), we understand that fulfilling the basic survival needs satisfactorily shifts a person's perception and allows for the expression of higher level needs amongst which lie spatial needs.

6.1.1 Spatial needs

We started investigating young adults' spatial needs by analysing what interviewees wanted the Plex environment to provide for them. Sifting through the interview transcript databases indicates that young adults mostly identified three important spatial needs; 'stimulation', 'security' and 'identity' in the Plex environment. The levels of satisfaction for spatial needs could later help to explain part of the reasons for territorial behaviors of English-speaking young adult people on the Plex residential environment.

6.1.1.1 Stimulation

For most of our interviewees, life in a Plex began with knowing and being known by other inhabitants and turning their attention to their visual or sonic presence in the space:

"[...] I came here alone and I didn't know people at the time [...]. So socializing was at first very hard for me. Then I began to say Hi whenever I feel. After a while, I realized that I don't know them but they kind of know me [...] So I think here, social contacts with my neighbours is not much about me. That is more about them and the way they are. I remember they came to knock on my door and asked if I wanted to share the Internet or if I needed anything the very first days I moved in".⁷⁴

However, a few of our interviewees complained that the unpredictable happened and sometimes the loud noises of the neighbours, over which they had no control, were seen as disturbing and made them feel over-stimulated:

"The most troubling thing here is noise. And I keep on complaining because the neighbours are very loud. During the day I don't care, but they mostly party till late. They are students and I think they don't have to wake up early in the morning. But I have to wake up at 6 o'clock in the morning so it is really annoying. [...] I think the problem is the insulation. You can hear those on top of you walking and talking all the time, plus those beside you and those on the first floor when they come out to chill in the summer. Oh, this is something I really don't like to hear. It is not easy to get used to these loud people".⁷⁵

The levels of spatial stimulation for Gen Xers vary from looking for a quiet life in Plex buildings, to being excited about participation in the active social life. However, we find clear evidence that the Plex's sonic environment in addition to the frequency

⁷⁴ 33 years old- Male- 3 years of occupancy in the Plex environment.

⁷⁵ 38 years old- Female- 7 years of occupancy in the Plex environment.

of contacts in the physical proximity has resulted in over-stimulation and stress for a number of interviewees. When asked about the possible reason for being stressful in the Plex environment, a number of interviewees talked about developing casual contacts with new people. Some Gen Xers pictured how they feel obliged to pay polite attention to those who reside in close distance on the adjacent balconies. They often start a conversation with a total stranger in close proximity of the shared space, to prevent having them feel ignored. However, when people don't know each other that well, the selection of the subject matters of the conversation or managing to engage in casual contact can be stressful:

"[...] It depends on your mood. Sometimes you are not in a mood to socialize with people or have casual contacts with them. If you don't feel like talking with people, it could be really bothersome here, especially in the summer. [...] You go out to chill and right beside you there is another person sitting in his balcony. And you can't just ignore your neighbour, right? [...] Well, you have to get used to that kind of contact. It is part of the lifestyle here".⁷⁶

Although, our interviewees discussed the need for more continuity and predictability in their surrounding social context, the Plex environment seems to encourage appropriate levels of stimulation that keep Gen Xers interested in these social aspects:

"[...] I'm a kind of person who likes open spaces. Now, I experience how cool it is to go outside and have a coffee while watching a quiet street on the back and a tree ahead of you. I like to feel that there is someone there who checks out for me. And well, if I hear something I will go to have a look outside too [...] I like the summer more because I can put a plant outside and enjoy the sun on my balcony. And I enjoy watching my neighbours hustle and bustle around".⁷⁷

⁷⁶ 35 years old- Female- 3 years of occupancy in the Plex environment.

⁷⁷ 37 years old- Female- 4 years of occupancy in the Plex environment.

6.1.1.2 Transitional spaces: the hierarchy of access and control

The spatial stimulation of the Plex environment has to be studied within the context of the toleration of human distances that this type of building produces among the neighbours. More often, at the first stages of their move in to the Plex's residential environment our interviewees found it a silent, featureless landscape. Gradually on this horizon, they began to hear the footsteps of other strangers or their voices. Soon they started to gain some recognition of each other, perhaps a nod, a smile, or eventually a verbal greeting mostly in the shared spaces of the semi-private ambiance of the Plex environment. Eventually, the Plex's physical form caused the residents unavoidably or intentionally to make casual contacts and start communicating. In the Plex context, distance is not a simple scale, but a critical element to shape relationships in between inhabitants and the way they interact with each other. We flesh out the critical points in terms of the physical distances of the Plex buildings with a specific examination into the semi-private zones which they offer to inhabitants.

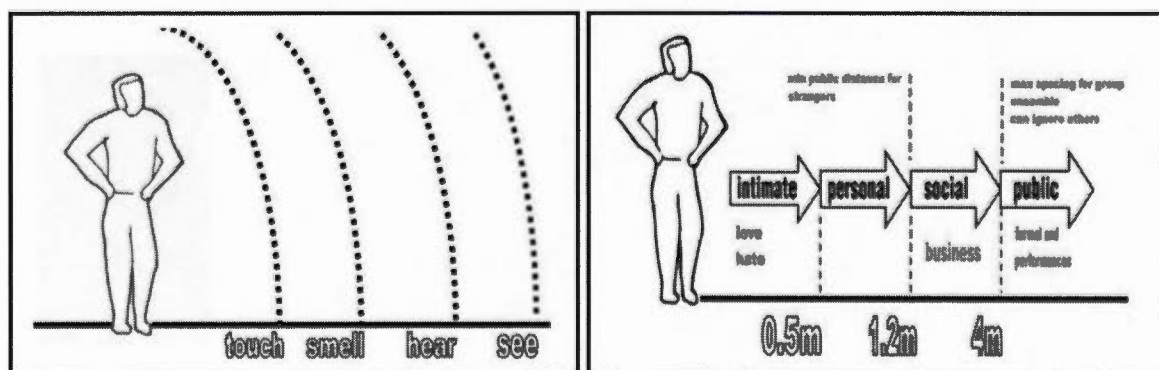


Figure 6.1 The order in which human senses work (left figure), The taxonomy of human distance in behavioural space (right figure)

In Plex buildings, the adjacent balconies, the outside spiral stairs, the long narrow internal stairs and the distribution space of halls, leave a distance that varies from less than a metre or so to about 1.2 meters⁷⁸. Analysing our interviewees, we noticed that the Gen Xers somewhat expected a form of greeting from others in semi-private spaces arguably because of the variety of possible ways that people can be socially dealt with at close distance. Although, our interviewees rarely mentioned being so close to their neighbours, the physical proximity of Plex buildings at this level appears to foster an ambience of trust in communication. However, few of the young adults failed to at least establish eye contacts with people around them, as they found it inappropriate.

" [...] I am not that much into communications with [them]. I prefer to have my own space because I have my own stuff to do. I read a lot and I like [introversion]. But when I am on my balcony and they come out I have to show some respect. Unfortunately, there is no way to skip the conversation when someone sits so close. So we always have a short chat about stuff. [...] Well, I don't want them to dislike me. At least when I'm out of the town they watch my place for me ".⁷⁹

The opposing response of our comparison group who were living in condominiums is worth studying. When asked about the kind of interaction with the neighbours in their shared spaces, young adult residents of high-rise buildings revealed different behavioural attitudes. The shared space in a condominium is limited mostly to the elevators in which intimacy and personal distance are often forced. However, on these occasions most of the young adults look for an apparent distraction by staring at the floor or up at the floor level indicator.

⁷⁸ The distance less than a meter, is an intimate distance in which we unconsciously expect to enter only with permission. A distance of about 1.2 meters is suggested as an absolute minimal acceptable distance to separate individuals in most common settings, however it is socially difficult to ignore others who are in these two close proximities (Lawson, 2001).

⁷⁹ 42 years old- Male- 3 years of occupancy in the Plex environment.

Moving from about 1.2 metres to 4 metres, which has been suggested as the minimum social distance (Lawson, 2001), allows us to somehow politely ignore others in public with no need to acknowledge our presence. Beyond this distance, the sense of contact with other people has effectively vanished. However, the social distance of the front access sidewalk, the back yard and the rear lane of Plex buildings foster a spatial solidarity for casual encounters that brought inhabitants and visitors together (Hanna and Dufaux, 2002). Our interviewees stated that they often carry on a conversation with only slightly raised voices from their balconies to the front access sidewalk or from the back yard to the passersby in the rear lane:

*"[...] I can't tell you exactly how many people I know but I know some [of them]. But here you don't need to know people to say hello or to stop and chat. It doesn't work like that [here]. Here, your neighbours just stop to say Hi and start to chat with you as they pass by your backyard or when they see you on your balcony. I think at the time these buildings were built there was a culture of spending time outside on the balconies but now that culture does no longer exist. But I really enjoy having a beer out on my balcony and watching people on the street or on the other balconies. In this block, people are usually interested in communication and friendliness and they care about each other. We might not go and see each other every single day but we talk to each other."*⁸⁰

It can be argued that forming these kinds of social relationships in the Plex environment is not just a matter of distance but also of spatial arrangement among which the balcony is the most referred to one. According to Marsan (1990) Plex housing was established for a newly arriving population from the rural world, who were used to galleries and verandas in their homelands. Therefore, it was necessary to consider balconies in the Plex physical form as a response in part to the spatial need of later residents. However, we found that young adults put a lot of emphasis on the Plex transitional zones, especially the balconies and porches, as a space of control

⁸⁰ 37 years old- Female- 4 years of occupancy in the Plex environment.

between the neighbours and between the inhabitants as well as visitors. In sum, the transitional zones in the Plex environment offer a hierarchy of visual and behavioural control, which flows from the gradation of space of the fully public domain of the street and sidewalks through to the fully private space that lies beyond the closed door. In the Plex buildings, there is a clear yet informal communication of the right of ownership in which the residents behave in an orderly manner without constantly upsetting each other. Such a hierarchy of transition zones delivers a greater control and tolerance towards a wide variety of behaviors over the issue of space. Semi-public territories such as front sidewalks and rear lanes are places to which the public has access but only the Plex residents will employ control over. Semi-private territories such as porches (galleries), back yards, balconies and outside stairs, that are under the authority of Plex residents offer no visual privacy for those holding them.

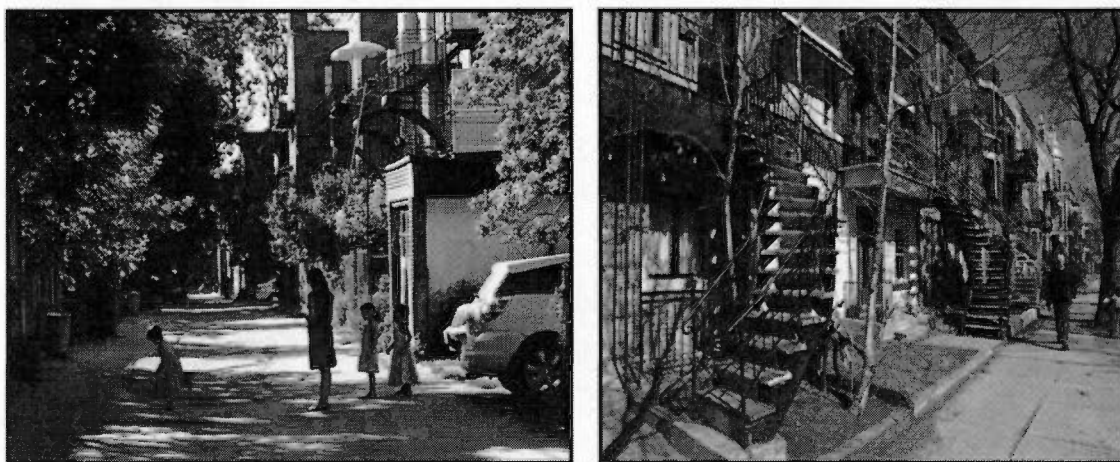


Figure 6.2 Semi-public territories, the spaces of control and access: Rear lane (above left) front sidewalk (above right)



Figure 6.3 Balcony (left photo) and back yard (right photo): examples of semi-private spaces in the Plex environment

On the other hand, the transitional spaces in the Plex spatial arrangement are more identified by the role that they play in establishing personal control rather than promoting accessibility to the semi-public space:

*" [...] The front balcony opens to the street and from there I see my neighbours. If the weather is good for sure there are people on their balconies or back yards. And when it is cold still people watch out. Here, people are inside and at the same time outside. They have their eyes and their ears on the street. We have people in the neighbourhood who are mostly drunks or are on drugs, those people with mental issues from Douglas Hospital. So we need to look over for the safety of ourselves. And if we don't see each other for a while we will check out to be sure everything is ok. I think it is really safe here. "*⁸¹

⁸¹ 38 years old- Female- 7 years of occupancy in the Plex environment.

6.1.1.3 Size and scale

People maintain a memory of residential scale from those features of buildings that appear to be provided specifically to conform to the residents' requirement for shape and size. In general, people are more attracted to the geometry and patterns of the built environment, which are related to human forms. If the features of the buildings appear relatively too small or superfluously large, people will notice it immediately. However they constantly hold the image of the human-scale features of the built environment in their minds (Lawson, 2001). Having said that, human scale is also an attribute of the built environment, which is interlinked with the social realm. Hence, there is much confusion, which exists about whether an environment is within or outside of the human scale. It is mostly because the physical features of the environment are more immediately noticeable than the social context, and people often attribute feelings of alienation to the physical surroundings, when they should actually be attributed to the social environment.

Plex buildings have a physical form and architectural features that speak to us of human-scale. The building's door is like a printed image of a standing human on the facade of the architecture. The windows, specifically the heights of their sills and the floor-to-ceiling heights of Plex buildings are other important clues to the human-scale dimension of this type of housing. However, in the Plex environment, scale is not an abstract architectural concept to the static human viewer. Indeed, in a Plex environment, scale is as much about people as it is about architecture, meaning it provides a social context for the inhabitants to see others and to be seen by them. Our interviewees indicated that the visibility of a Plex's human-scale is not only addressed by young adult residents but also described by the comparison groups' study:

"Sometimes, I walk down Wellington Street to do shopping and on my way back I move across those line of duplexes and I can feel the pace of life there. Sometimes, I can hear the kids playing in the rear lanes or the sounds of music back off the walls. I can see people having dinner in their yard or someone reading a newspaper on her porch or other things [inside]. I think two or three story buildings are a perfect size to live in. It seems to be a comfortable size for a building. I personally don't like high-rises but my husband insists on keeping his condo. So we are kind of stuck there".⁸²

6.1.2. Comfortable housing in response to the physiological needs

People are not all the same and they vary in their specific physiological needs. Referring to the place of residence, we face 'house' and 'home' which are overlapping words with distinct meanings. While house represents mostly an architectural concept, home is associated with the aspects of humanity (Cuba & Hummon, 1993; Lawson, 2001). In this thesis, we understand the notion of 'feeling comfortable' as a bridge concept extant inside and outside of the Plex buildings. We acknowledge that people do not always feel comfortable residing in a place. Comfort is a desirable state, which needs some compromise in order to maintain it. This part of our study aims to explore how much the architecture of Plex housing responds to the residents' physiological needs and contributes to the feeling of the humanity of space. In more accurate terms, how does a Plex building become a 'home' for young adults? The discussion with young adults about the inside or outside of their flat, essentially reflects the influence of the Plex's spatial arrangement and objects enclosing that space, the material used, as well as the transitional zones relating to the satisfaction of their metabolic, sonic, visual and functional needs.

⁸² 35 years old- Female- 3 years of occupancy in a high-rise in Verdun- Comparison group.

6.1.2.1 Metabolic comfort:

The basic level of our metabolic needs concerns aspects such as adequate lighting and fresh air to breathe. Although, some studies extol the virtues that the front and rear facades of Plex buildings provide for natural lighting and ventilation (Hanna and Dufaux, 2002) some of our interviewees complained about the lack of these elements in their flats. They actually conveyed that a Plex's windows are not so much useful for providing light and ventilation, but more for allowing the residents to remain in contact with the world outside. Interestingly, their sense of discomfort refers more to the situations in which they were unable to see out of a window, rather than addressing the effect of daylight rhythms on their comfortable living conditions. Our brief analysis suggests that access to the outside for young adults is a response to both their metabolic and security needs. Amongst all different spaces of the Plex building, the kitchen and its adjacent back balcony is generally a space of high dominance, which may recall traditional rural lifestyle patterns of Québec in the Plex form configurations:

"[...] Our flat has a very long plan; the windows are just at the end and we don't have enough sun. We have a narrow hallway, which is too dark and it looks a bit depressing in the living room. But then I realized that on the other side, our kitchen has a lot of natural light. The kitchen is nice and comfortable. We are spending most of our mornings here, and we have a big back balcony so we are kind of in and out all the time. We don't use the other rooms that much because there is no view, and it is a kind of gloomy not to see the outside".⁸³

According to Hanna and Dufaux (2002) compact volume, stacked format and front and back orientation have made Plex housing relatively well suited to the extreme weather conditions in Québec, except perhaps for the outside stairway situation in

⁸³ 35 years old- Female- 4 years of occupancy in the Plex environment.

winter. Talking with our interviewees about wintertime brings us to conclude that the most troubling part for them is not the slippery outside stairs or the time-consuming shoveling but the poor insulation of the Plex buildings. In this vein, the following statements of two Plex residents illustrate the winter issue:

*"[...] Winter is not as bad as you think here. The only problem is that we don't have indoor parking here. So when [they] come to clean the road we have to move our cars, which is bothersome in the winter and we have to spend so much time shovelling. But the rest is ok. My neighbours upstairs have a dog and they have to walk him up and down every day and night and they seem to be fine with the stairs. We have to put salt in front during the winter but it's not a big deal for us [...]"*⁸⁴



Figure 6.4 A Triplex winter look from the third floor, Verdun, Montréal.

⁸⁴ 35 years old- Female- 4 years of occupancy in the Plex environment.

“ The insulation of the building is really poor. It gets really cold, especially the bedrooms. We lose a lot of heat because of that and there is nothing we can do about it. Last year, we even received an electricity bill of almost 400 \$. That’s too much [...]. We have to do lots of snow shovelling to keep the pathway safe. The stairs and the front sidewalk are slippery and in winter time it could be dangerous.”⁸⁵



Figure 6.5 A typical snowy day view of a traditional Duplex in Verdun, Montréal

6.1.2.2 Sonic comfort:

Any unwanted sound could be considered as noise and for many of our interviewees, Plex housing represents a noisy environment, which they try to get adapted to. In terms of the sonic comfort, young adults not only mention the decibel level of the noise around them but also the invasion of their privacy as a result of no control over the source of those noises. Although, the everyday sonic quality of the Plex’s

⁸⁵ 38 years old- Male- 3 years of occupancy in the Plex environment.

environment has occasionally been of major concern for the young adult residents; it does not generally have a negative effect on their patterns of attachment to the Plex environment:

*"[...] At the beginning it was a little bit bothersome for me to hear [them] but then I got used to it. And I think when you get used to it you don't hear them that much. The only thing is that sometimes you may not be in a mood and well, on those moments that you need to have your privacy it is not comfortable to hear people or their music or when they walk or things like this. You don't want to feel their presence. Here, my neighbours are generally respectful but I still am careful with my volume".*⁸⁶

As we observed young adult residents are more focused on the visual aspect of the Plex environment than the everyday sonic quality of it. It might be because in general the visual quality of the space is the first thing people become aware of and their attention is drawn to the visual representation of the space more than to the sonic qualities of it. Later in this chapter we will discuss the visual quality of the Plex buildings.

6.1.2.3 Barrier-free environment:

It is clear that people have a hierarchy of abilities and the functional layout of the environment is one that well fits their needs in order for them to be able to effectively use it. Our analysis indicates that Plex buildings do not offer much of a barrier-free environment for physiologically impaired people. For instance, people who are wheelchair-bound, handicapped or have great difficulty walking, such as some of the

⁸⁶ 33 years old- Female- 5 years of occupancy in the Plex environment.

seniors, will find Plex stairs a barrier for use in everyday activities. While young adults do not notice any difficulties in their movement in the Plex environment, they are concerned about the absence of a ramp and a lifting system for physiologically impaired people in this type of architecture:

“I don’t know how old people take the stairs or imagine a blind person wants to take those stairs. It is really challenging and the outside stairs are really dangerous in the winter. I think years ago, they didn’t have big TV’s or a fridge or those big beds, so it was practical at the time but it is not that practical for people anymore. I think the best idea is to remove these spiral stairs and replace them with more practical ones”.⁸⁷

6.1.3 Comfortable housing in response to the psychological needs

In the previous theme, we examined the ways that Plex buildings determined how far people choose to relocate, how warm or cold they were, how much they see and hear and with whom and how they interact. In this theme, we explore the ways and degrees in which young adults psychologically feel satisfied by choosing to live in a Plex environment. For some of those whom we interviewed, the Plex as a convenient residential choice seems to be based on a feeling of comfort with their residential environment. However, ‘feeling comfortable’ evokes significant internal factors, like one’s emotional state and sense of security as well as external factors such as the physical comfort, fellow dwellers behavior and attitudes, financial satisfaction, etc. (Radice, 2000).

Before going any further, we need to make some points about the analysis which follows. Firstly, our analysis deals with feeling comfortable about living in a Plex

⁸⁷ 38 years old- Female- 7 years of occupancy in the Plex environment

environment, both as a home and as a neighbourhood. Consequently, our objective is to understand what makes the young adult residents feel the way they do. Feeling comfortable in this context is explored by attempting to access the sense of being at home, the notion of safety and security, accessibility, affordability and the way that the Plex environment responds to the young adult residents' esteem and cognitive needs. The concept of 'home' suggested by Low (2008) acts as a local representation of self, which reflects a wide variety of personal concerns such as aspirations, motivations and values, as well as physical well-being and lifestyle choices. As she explains, 'home' is associated with two different kinds of psychological aspects. There is the proactive aspect, which associates 'home' to a friendly place where residents feel safe and comfortable.

The second aspect is a reactive one, which is more associated with the safety and security needs and a desire to be protected from perceived or imagined dangers. These two aspects of 'home' are dependent on an individual's experience, physical location and social status. However, for some at present, rapid transformations in the social and economic life of people and the temporary-like experience of a residential place, influences their perception of home and structures their feelings towards an environment. Still, for most people, the memories of home as lived spaces, inhabited by family, along with personal things and belongings, are often nostalgic and sentimental. In this sense, those who are subjected to violence and sexual abuse in the home environment are more likely to feel homeless at home or may become homeless in an objective sense.⁸⁸ Feeling psychologically comfortable in a residential place is not only limited to the building's characteristic but also to the whole neighbourhoods context. The neighbourhood, based on what Kusenbach (2008) states, has two main layers

⁸⁸ The relationship between gender and home, with a specific look at women has been widely studied (e.g, (Mallett, 2004). However, in our research the gendered perceptions of home is not a matter of study.

which urban residents seem to distinguish through their practical routines. The first layer by this means refers to the 'face block zone', which is entirely devoted to social occasions, while the next layer indicates the functional part of the neighbourhood, which contains the commercial and public activities. However, these layers may overlap and it might be difficult to separate different types of neighbourhood activities from each other. When we turn to the question of 'feeling comfortable' in our study, young adult residents were mostly quite specific about their likes and dislikes. They were also comparatively clear about whole aspects of these preferences in the Plex environment. young adult residents addressed a partial degree of satisfaction of their physiological needs within the Plex environment. However, our research shows that the Plex environment seems to work well in response to meeting the particular psychological and social needs of its residents. We aimed to explore what young adults commonly refer to in their overall evaluation of the Plex residential environment. In order to do so, we needed to link the expectations, preferences, feelings, emotions and behaviors of young adults to the physical and perceivable attributes of the Plex environment.

6.1.3.1 Sense of being at home:

The housing unit and its environment within the neighbourhoods in which people live contain symbolic messages about its inhabitants and act as a symbol of 'self'. In this sense, the built environment is a way of knowing people's tastes, their aesthetic values and the culture to which they belong as well as their socioeconomic status (Lang, 1994). A growing body of literature indicates that people mostly referred to the emotional experience of their residential environment as a 'sense of being at home', 'of being comfortable', and being 'really me here' (Windsong, 2010; Mallett, 2004; Cuba & Hummon, 1993; Relph, 1976).

These terms symbolize an individual's relationship with significant locales, a sense of belonging to a place and one's socio-spatial status.

Our analysis confirms that within the duration of residency in Plex buildings, young adult residents develop a sort of emotional tie to their environment. However, the shared interests and values influence the patterns of relationship between themselves and the other inhabitants and within the whole residential environment. In this study the existence of 'at-homeness'⁸⁹ in Plex buildings is measured by directly asking if young adults feel at home in their flat. The series of open-ended questions posed to those who responded positively to this question, constitutes our measure of the Plex's 'at-homeness' attributes. During our interviews, we witnessed young adults sense of being at home in their Plex buildings as being self-related, family-friend related, community-related or dwelling-related, all of which involves in part the feeling of personal comfort within the physical characteristics of their flat.

The self-related aspect of the concept of 'at-homeness' refers mostly to the psychological state of happiness in their Plex buildings and the personal feeling of comfort of young adults in that environment. It is clear that each interviewee would have different expectations and values in searching for happiness and trying to feel comfortable in a place. However, in general, the affordability, accessibility, security and aesthetic elements of the Plex's forms are mentioned as referred factors in making young adults feel at home. The following quotes come from different interviewees, which highlight the way that young adults express their self-related phase of 'at-homeness' in the Plex residential milieu.

⁸⁹ The expression of 'at-homeness' according to Cuba and Hummon (1993) has been widely used in both the qualitative analysis of place identification and the quantitative studies of community attachment. This expression is mostly used to define the existence, the affiliations and the locus of the notion of place identity.

"It is really homey here. When we came to visit the flat, I liked it so much. It was cozy. At first I was planning to stay for a while and try to look for something better but after a couple of months I changed my mind. [...] And well, it's been three years that I have been here and I think if everything goes well I will stay here for a couple of years here. [...]. And I feel comfortable because we are so close to the Metro and we can easily reach downtown anytime we want. It really feels like home here".⁹⁰

The possibility of nearness to family or friends and the chance of meeting and getting to know the neighbours are the ways in which we track the family-friend related aspects of 'at-homeness' among young adult residents of Plex buildings. The following quotes are an indication of how this dimension of 'at-homeness' is treated in our study:

"I like this building. I have easygoing people living around me. We became friends really fast. I like my neighbours. I feel comfortable here. The neighbourhood has a good diversity. There is a mom and her two kids in the flat beside me, and those three young girls living upstairs, and on the first floor is an old lady. She is really open-minded. As a gay couple we really feel comfortable here. I liked it that I know my neighbours. It has a sense of knowing where you are a sense of familiarity".⁹¹

A couple of young adults, who have been settled in the Plex environment for a longer duration of time, argue that when there is a large number of people coming and going frequently, building up a sense of home and community and making personal connections is not easy. They discussed the idea of creating a stronger sense of home through developing networks of relationships with close friends and extended family members or families of their own. Young adults generally argue that these kinds of relationships are important because they enable them to invest meaning in a physical place called home:

⁹⁰ 31 years old- Female- 3 years of occupancy in the Plex environment.

⁹¹ 33 years old- Male- 4 years of occupancy in the Plex environment.

*"I know the neighbourhood, which is really a good one and I can see that it is going to be better and better. You know what? It feels like home here. I have a couple of cousins still here living around and two of my childhood friends, so it is like I have my extended family here too. So it really makes me feel comfortable that I know the whole neighbourhood."*⁹²

The community-related dimension of 'at-homeness' has to be seen mostly in the ways in which young adults interact with the other residents of their neighbourhood. A generated sense of community and the attractiveness of the Plex lifestyle are some of the most significant subjects, which our interviewees talked about:

*" [...] Here it feels like my place. I love it. I mean it's very local. It's homey. People here are from many different backgrounds. I like to live in such cultural diversity and I like my kids to grow up with this culture. It is good for them to accept and respect others. I don't like their life to identify with just white Christians like what I experienced as a kid in the United States. [...] Here we are in a multicultural city and I like them to live outside ghettos."*⁹³

*" [...] Oh, I started feeling at home the moment that I realized that I knew people when I saw them around. I think it took a good three months before I felt comfortable in my place. Well, I have two young daughters and I am concerned more about the social life of the neighbourhood than the decoration of their rooms for instance. I mean the most important thing is outside of these walls because for the inside of my flat I can find a solution but if something goes wrong outside I have no control over that. Now, that I know what's going around, I feel comfortable here."*⁹⁴

In our study, the last dimension of the sense of being at home in the Plex buildings is the dwelling-related dimension, which is measured mostly through the variety of young adult residents' personal possessions and the patterns of ownership in their

⁹² 37 years old- Female- lifetime occupancy of the Plex environment.

⁹³ 38 years old- Male- 3 years of occupancy in the Plex environment.

⁹⁴ 39 years old- Female- 4 years of occupancy in the Plex environment.

residential environment. The following is an example of how they express their dwelling-related aspect of 'at-homeness' in a Plex building:

*" Why do I feel at home? Well, for so many reasons. I think the flat is big enough for me. I work from home and for the first time in years I have a small office-room in my flat. I'm feeling much more comfortable here than my previous studio on Sherbrooke street west. That neighbourhood may look better but my apartment there was so small. I was feeling like I'm living in a box. Here with almost the same price I have more space. I have a balcony and it feels good to sit outside sometimes. The neighbourhood's location is good. Well, it is not really downtown but still close to it. I came a bit further but I pay less and I have a much better quality of space here. I am looking to buy a flat in this neighbourhood. "*⁹⁵

6.1.3.2 Safety and security needs:

Survival and safety needs according to the Lang (1994) model are closely linked. Aside from the physiological need of protection from natural disasters and unpredictable dangers of the outside environment or automobiles, in a residential setting residents psychologically seek a degree of stability, privacy, and control. However, a personal sense of safety and security is independent of actual neighbourhood crime rates.

Analyzing the notion of safety and security in the Plex environment, we realized that young adults place a lot more emphasis on the possibility of natural surveillance of their residential units. Most of our interviewees were by and large happy with the degree of natural surveillance that Plex housing offers them. It confirms the notion that the orientation and human-scale of the Plex buildings and the spatial configuration of the balconies, porches and backyards, deliver the appropriate sense of safety and security upon the everyday life of the young adult residents. Our

⁹⁵ 38 years old- Male- 3 years of occupancy in the Plex environment.

findings show that having visual access and control of the surrounding environment is a key factor in managing the appropriate level of privacy for young adults. These young adults confirm that the natural surveillance on the Plex environment involves everyday watching out for people and looking out for their activities is an integral part of a Plex residents own life:

*"[...] In this neighbourhood, there are a lot of kids playing outside in the back alley and you see them all the time and you see the parents are watching them from their balconies or the yard or the kitchen. So it makes me feel that it is safe here, that it's ok. Well, as a parent I wouldn't bring my kids out if I wouldn't see any kids outside and if I couldn't have my eyes on them playing."*⁹⁶

In general, young adults perceived Plex neighbourhoods as safe places with a very low crime rate or no crime at all. Besides the significant role of natural surveillance, the specific social context of Plex neighbourhoods and the frequency of casual contacts are noteworthy factors in response to the young adults safety and security needs. In the next chapter the social context of Plex neighbourhoods will be discussed more profoundly:

*"It is safe here. I have a good feeling to live here. I think here I have a sort of relationship with neighbours that if there is a problem I can call someone or they can call me. I feel as if I can count on my neighbours a lot. If they don't see me out for a couple of days for sure one is coming to my door to see if everything is all right and I do the same especially for the seniors around. So these aspects of security or friendliness add a lot to my comfort here."*⁹⁷

On the other side, the comparison group in our study typically refers to the artificial

⁹⁶ 38 years old- Male- 3 years of occupancy in the Plex environment.

⁹⁷ 35 years old- Female- 4 years of occupancy in the Plex environment.

surveillance like using the video surveillance cameras or the presence of the police as the primary sense of law enforcement to protect them and assure them that what is going on in their residential environment is acceptable.

Nevertheless, the comparison group for the most part did not perceive the Plex neighbourhoods as a safe residential environment. Although, a few of them did appreciate the cluster of inhabitants on their balconies, staircases and front porches as a vibrant form in the urban context, they preferred not to live in such old buildings, without a form of artificial surveillance which oversees people in a close proximity and fosters a sense of security. Such feelings are expressed by another Verdun resident who does not live in a Plex neighbourhood:

*"[...] In a scale of ten I can say Plex buildings are about six. Well, first of all, those are mostly kind of working class neighbourhoods. They are poor people and for me poverty brings more crime. The Plateau is an exception because there are so many artists living there who give it a prestige. But here in Verdun, they are not artists and I doubt if there are so many professionals too. [...] For me it is not easy to live somewhere without any management and control. And especially in the Plex buildings, no camera, no lobby, no doorman, oh and I don't know if there is any police supervising the streets. So I think in general speaking, it is not safe there and if you don't feel safe, well you will have a hard time living in a place especially for women."*⁹⁸

The following quote mentions "facing the street and all those strangers" which suggests that the patterns of transition zones also have a distinct role in helping the inhabitants to know which people "belong to" their surrounding environment. On a daily basis young adults may not notice how transition zones gradually transfer from

⁹⁸ 41 years old- Male- 4 years of occupancy in a single-family house in Verdun- Comparison group.

public to private spaces. Yet they highlight the role of limited access to their semi-private spaces and provide complete visual control over the semi-public spaces as important factors that improve the sense of security in the Plex environment:

*"[...] Well, here is not like you open the door and you are suddenly facing the street and all those strangers! Here the outdoor space belongs to the residential area. That it is our back alley and this is our front sidewalk. The back alley is a kind of our private alley. I mean there is not traffic there and mostly kids are playing there. And mostly when people passby I can see if they belong to this block or not. Nowadays people move a lot and of course I don't know everybody here but still, after a while I start knowing them by face even though I don't know their name. And it makes me feel safe cause I know most of my neighbours by face and I know which building they live in and I know some landlords here and I like that I know who is my neighbour."*⁹⁹

Indeed, having eyes on the street and looking out for other neighbours is an important part of the Plex's neighbourhood culture. We note that although this culture increases the sense of security, it could reduce one's privacy as well. Some of our interviewees explain that they don't like to have such a lowered level of privacy, despite other advantages of having eyes on the street. The following is an example of how this culture could invade the appropriate level of privacy for Plex residents:

*"The only thing here that I don't like that much is the physical proximity to the neighbour; I don't like them to have their eyes on my back yard or on the other side, on the porch. I don't have that much privacy here. Well, sometimes I wonder if the balconies in the other kind of buildings are as close as us? But I think the lifestyle is different here. I guess people are different here. Especially those who have lived here for a long time, or the locals, they are more into gossips [Laughing]."*¹⁰⁰

⁹⁹ 45 years old- Male- 3 years of occupancy in the Plex environment.

¹⁰⁰ 33 years old- Female- 5 years of occupancy in the Plex environment.

6.1.3.3 Accessibility:

Urban design is traditionally oriented towards dividing the city into bounded districts, which are further subdivided into neighbourhoods. This pattern is mostly followed in order to provide a hierarchy of well-defined areas with the appropriate facilities located in each zone. Amongst the different zones, the central business district acts as the symbolic heart of a city and remains predominantly the core of most urban activities.

As our research of local residents demonstrates, Montréal's downtown area still appears to be important to our interviewees in terms of its psychological geographic sense of place. Such importance demonstrates that young adults still overwhelmingly regard Montréal's downtown as a significant symbol. Therefore, easy access to it from their residential place is important to almost all of them and is one of the factors which have been mentioned in their residential satisfaction context:

*"[...] One of the main reasons that we chose it the first time, was that it is **close to downtown** and really accessible because our home is about 5 minutes from the metro. Before we came here, people told us that we are gonna be far from downtown and from everything else, but it's not. I like it here because it is easy to go there and everywhere."*¹⁰¹

*"What I like here so much is that I only have to take one bus which **brings me directly to the downtown** and it's great. Imagine! **In less than 30 minutes I reach there** and I don't have to transfer or walk for a long time. And for a four and a half room apartment, which is almost close to downtown, the rent is really good."*¹⁰²

¹⁰¹ 35 years old- Female- 4 years of occupancy in the Plex environment.

¹⁰² 33 years old- Male- 4 years of occupancy in the Plex environment.

These two quotes illustrate how easy access to downtown improves the sense of comfort for young adult residents while it helps to foster a greater sense of place towards their residential neighbourhood. Besides the convenient accessibility to downtown, young adults identify a great level of comfort in terms of being nearby to various services and facilities inside their Plex neighbourhood. The proximity to shops, schools and a community center as well as childcare facilities and sport services are highlighted points related to access satisfaction. Moreover, easy access to the public transportation system on the one hand and the safe sidewalks throughout the Plex neighbourhoods highly improve this aspect of the residents' satisfaction and comfort:

*"[...] I really like to walk to do my daily groceries and here I am close to everything. It makes me feel comfortable that I have walking distance to everything that I need in the neighbourhood. There is a gym on the corner of 2nd avenue and Verdun. I don't have to go anywhere else."*¹⁰³

Amongst those groups of young adults who have a child or a pet, the ease of access to the outdoor spaces, parks and the riverside is noteworthy for being most advantageous to the accessibility in a residential environment:

*"[...] I really like to go to the park and run with my dog. And when I visited the neighbourhood, I realized that there is a park near to me, which is an asset. After a couple of years living on a busy street in downtown I feel that being close to a park or nature or having access to some amenities like that is really a plus, especially for the families with the kids. There is a river here. I took my children there, at least twice a week in the summer. And I used to talk with other parents at the park and with a few of them, we are friends now."*¹⁰⁴

¹⁰³ 38 years old- Male- 7 years of occupancy in the Plex environment.

¹⁰⁴ 37 years old- Female- 7 years of occupancy in the Plex environment.

6.1.3.4 Affordability:

Plex buildings have a custom-built attraction for both homeowners and renters. In most of the Plex buildings, the owner occupies one of the flats and rents out the others in order to subsidize the mortgage. This unique arrangement has provided a boost to generations of Montréal immigrants. In the old established Plex neighbourhoods, the landlords were mostly from the more established groups of immigrants, while the tenants were more recent arrivals, usually from different ethnic groups. This ebb and flow of diverse groups of owners and tenants in the multitude of Plex neighbourhoods throughout Montréal has served to reduce cultural tensions and creates an urban fabric in which there is not as much historic segregation along racial ethnic or cultural lines.

Broadly speaking, our interviewees perceive themselves as professionals who can afford diverse types of residences in different parts of the city. Yet our study confirms that for most of young adults' economic factors were their primary reasons for choosing Plex buildings as a residential place. When we address the notion of comfortability in the Plex buildings, we note that young adults underlined the affordability of these residential places as strong a factor as their desire for accessibility or a sense of security:

"Well, you may have lots of preferences and expectations but in reality you are limited mostly by your budget. I think a place like this in the Plateau would cost me my life to pay [for it]. It is cheap here [...]. The same place in some other parts of Montréal, Oh my God, maybe would cost at least 400 \$ more than here [...] Because it is affordable so people come to rent an apartment here and then they decide to

buy [something] here [...]."¹⁰⁵

6.1.3.5 Esteem needs:

Almost all people have a need for self-respect or self-esteem. There is an innate need to be perceived to have a degree of personal status as well as a need for that status to be perceived by others. The feeling of self-worth and self-confidence is mostly a result of reaching a certain degree of satisfaction of achievement from both of these aspects. The strength of the need for status realization is much dependant on the individual's socialization process and the cultural framework in which it took place. However, the values of a society in terms of status may change over the span of time (Lang, 1994).

The selection of a place to live in adulthood makes a statement of one's self-esteem, status and values. Gober (1992) states that the housing shortage especially for those with financial limitations restrains choices significantly. Yet, the residential choice and the time that is spent at home or in the home neighbourhood, contribute to the person's sense of self, even for those who aspire to escape from their habitation. Although the architectural quality of a built environment contributes to the prestige of it, the different prestige levels of different areas of a city are in some part a result of the overall ambience that exists there. Such ambience depends upon the attributes of the built environment, the type and quality of the activities that take place in a built environment and the sense of prestige felt by those people involved in them. The quotes below contribute to representing the way that young adults perceive the prestige level of Plex neighbourhoods:

¹⁰⁵ 33 years old- Male- 4 years of occupancy in the Plex environment.

*"I am very picky about sectors and neighbourhoods and as soon as we started looking around and then we visited the apartment, I liked it. It matches our style. [...] I like to live with people close to my class, close to my lifestyle, like educated people and professionals and I prefer them to be young. Living with elderly people makes me depressed. So here, our neighbours are mostly young professionals and we like it."*¹⁰⁶

*"I think this neighbourhood has a very good potential to be a better place and it will be different in a very close future. Because I see young people are getting more and more interested in moving into the neighbourhood and live here. [...] Many newcomers are investing in the neighbourhood [...] In some neighbourhoods, there are just Francophone or Jewish or Indians or Chinese. But here you could be anybody and that's ok. You don't feel segregated."*¹⁰⁷

The two previous opinions bring us to the social context of the Plex neighbourhoods, an important factor in conveying the image of a certain positive residential status for its young adult residents. However, analysing our transcripts proves that an important communicator of status for young adults is the rich symbolic meanings of the specific architectural form of the Plex buildings and its inherent heritage ambiance.

These are two further examples that indicate the relationship between the status and the architectural features of the Plex buildings:

*"I like this flat because I like these old chandeliers and because I love the floors and the kitchen because everything is in wood. And it looks beautiful and very natural. It looks kind of elegant. [...] For me as an artist it's just amazing to be in this specific old type of neighbourhood. I like old places because for me the new places are just empty boxes. There is no history inside. Here, in this apartment I have nice ceilings with beautiful wood floors and doors and closets and everything. Here, I am living with art and history."*¹⁰⁸

¹⁰⁶ 39 years old- Male- 4 years of occupancy in the Plex environment.

¹⁰⁷ 35 years old- Female- 5 years of occupancy in the Plex environment

¹⁰⁸ 38 years old- Male- 7 years of occupancy in the Plex environment.

*"I like the stories behind these walls. For example, when the heating and the electricity is on all the time, I still feel so cold at my apartment, I ask myself how in hell they lived in that time and if they were freezing all the time? What did they do? Or how hard was it to live with candles and take the stairs at night. I like to live in a place with such a long history. And my landlord told me that the closet door has a hundred years, oh, every time I open that closet I can't stop thinking about all those ladies who put their dresses there before me and who touched that door. It is so exotic for me."*¹⁰⁹

6.2 The heritage awareness in the context of Plex environment:

In our research, we have noted that the residential mobility of the younger groups of the population into the traditional Plex neighbourhoods is accompanied by a redefinition and reinterpretation of the cultural heritage of this historical landscape. In many cases, young adults state that they want old things to "seem" old. This romantic nostalgia for the past, according to Lang (1994) stems from a psychological need to know the past as a reference point:

*"[...] I took it [the flat] more because of the home not for the neighbourhood. I like the neighbourhood too but when I visited the apartment, all these old features impressed me. This place has its own history. This triplex belongs to a Greek family who were living here for about three generations. And the flat that I took belonged to their grandparents. It is not renovated. They just painted the rooms and a little bit of touch up in the bathroom. So I feel like I'm living in a very old ambience. Especially my bathtub. It is really nostalgic to take a bath in it. And those French doors, oh they are elegant."*¹¹¹

¹⁰⁹ 35 years old- Female- 5 years of occupancy in the Plex environment.

“ I think no other kind of building could replace these old places. Never. Because this is the signature of the past and the traditional architecture type of the city. I know that some owners are poor and they don't have enough money to take care of their place and well, the tenants don't care too. But this is very important to restore these places and to keep them in good shape for the next generation. Otherwise, how they would know about the past? They will miss a part of Montréal's history. ”¹¹²

However, data provided to us from our study indicate that a contrast exists between young adults' appreciation of the historical heritage of the buildings and their huge desire for remodeling and renovating the Plex buildings. This contrast is mostly between preserving the past for its deep-rooted features and the need to be doing changes in response to the shifts in the residents' lifestyles and social values. Indeed, a number of our interviewees' emphasized the renovation process by which they have been trying to turn their flats into a more compatible and adaptable one. According to them, by doing so, Plex buildings may better respond to the commercial forces of the housing market, although in many cases, the symbolic and cultural attributes of the building are neglected. The following quotes are examples of how the lack of heritage awareness during the renovation process could destroy the historical associations as well as the symbolic and cultural values of a Plex building:

“ [...] The arrangement of my flat is very good, we made an open kitchen concept which is really what we wanted to have. When I am cooking, I am always facing outside; I can see all the rest of the place. It is like a big open loft. We also took that wall off and we made it like a big open space as our workspace and our TV room. ”

¹¹¹ 41 years old- Male- 4 years of occupancy in the Plex environment.

¹¹² 35 years old- Female- 5 years of occupancy in the Plex environment.

*So we really liked it this way. It is just a very right size for now. We have a very nice big bathroom and a wonderful Jacuzzi in my bedroom right inside not on the separated bathroom. The Jacuzzi was one of the first things I asked for when we started our renovation. It is one the main reasons I don't want to leave for now because I have everything I like here. And we spent a lot in developing the space to what we like."*¹¹³

*"[...] The moment we decided to buy this flat, one of our friends who is an architect came and gave us some clue about the cost of its renovation. Then we moved in and we changed everything, even the layout. We changed even the location of the kitchen. We brought it to the front. And then we removed those two walls and we made an open, one-piece space, basically for our living room, dining room and kitchen. We even changed the brick, but in the same style, and we changed the façade as well. And then we continued the brick style inside the flat. You can see them here. We actually built two columns [...]"*¹¹⁴

According to Lang (1994) mobility could result on some levels in a sense of loss of a 'home'. In many cases, documented in our study we noticed that as soon as young adults moved in, they started to eliminate the touches of previous inhabitants through a partial or full renovation. For most of this group a greater sense of being at home started, once they changed the physical features and the spatial arrangement of the Plex based on one's needs and their own taste. However, the process of improving the Plex's old environment and transforming it into a more modern one by adapting new technologies and structures is hard to achieve without compromising some of the previous inherent values:

¹¹³ 38 years old- Female- 7 years of occupancy in the Plex environment.

¹¹⁴ 34 years old- Male- 3 years of occupancy in the Plex environment.

*"[...] The arrangement of the space was not that much good for us. It absolutely needed to be renovated. Everything was so old and somehow unworkable. It didn't look good at all. We did a lot of work here. We actually made it a home. I think whoever buys a place here need to do a renovation to feel happy with his place. Here, we live in an old building, which has a brand new kitchen and we take a shower in a 100-year-old bathroom but with modern stuff. Oh, it is so nostalgic, but we spent a lot to make it homey. But still, I believe it is worth it."*¹¹⁵

This latter interviewee added that the old structure and materials of most Plexbuildings make the renovation process inevitable. However, in our study we did not observe a significant ambition of young adults to restore Plex buildings to what they were before. In fact, although young adults strongly express their appreciation towards the history and heritage aspects of Plex environment, they still chose to remodel their flat as modern as new condominiums. In such a context, the sense of place living in a Plex building is mostly fostered by a symbolic ambiance of the historical image that is appreciated by the residents.

¹¹⁵ 38 years old- Male- 3 years of occupancy in the Plex environment

6.3 The formal, sensory and symbolic aesthetic of the Plex environment:

Formal aesthetics in urban landscape is commonly associated with the perceptions of the beauty in the geometric quality of the layout of the buildings, streets, neighbourhoods and urban furniture (Lang, 1994). In everyday life, people stop, examine and appreciate the formal structure of the built environment. The formal aesthetic of a built environment can be evaluated in terms of the features that create the texture and the shapes of its buildings, their size, the way they relate to the street, how they enclose space and their detailing on a smaller scale (Lawson, 2001; Alexander, 1980). Yet, the 'sense of place' is not generated through the formal aesthetics of the built environment, but as a result of the interaction between people and their places.

In our study, we noticed that young adults appreciate any degree of craftsmanship and architectural details that they find in their Plex buildings. However, the formal aesthetic of Plex buildings does not exist as isolated objects but more in the combination of a variety of elements that blend together so well that the building appears unified:

"[...] When you walk inside your home, you want a space that feels comfortable and attractive and has a distinct personality. I like my flat because it is really beautiful. Well, I like, the ceiling, which is super high. It is so elegant with those ornate chandeliers and crown molding on the walls, it gives a special sense to the salon. In my bedroom the closet is really a piece of art. I wish, I could take it with me, whenever I leave. The brick exteriors, the façade, even the wrought-iron balconies are so old and kind of artistic too. Everything works well together. [...]"¹¹⁶

¹¹⁶ 39 years old- Female- 4 years of occupancy in the Plex environment.



Figure 6.6 The repeated elements of design in a regular manner, creates a sense of rhythm that gives a dynamic quality to the Plex, Two Triplex buildings in Verdun, Montréal

In the old established neighbourhoods of Verdun, as we have observed, rhythm is very apparent in the streetscapes of Plex buildings with rows of outside stairs, balconies, repeated shapes of windows, arches, and the way in which bricks are laid.

As we move across the line of Plex buildings, we can feel the equal weights of them balancing one another in terms of creating a collective composition. Such balance and

rhythmic patterns of the Plex' architectural form adds visual excitement for those who use that space. It is noteworthy to consider the proportional relationship between interior spaces and the size of the human body in the Plex buildings. Ordinarily, the proportion of the room has to be arranged in a way that people feel comfortable moving in it. However, young adults usually complain about the sizes of rooms and the narrow long corridors without a window in their flats. Exceptions to this are those who live in renovated flats, where the arrangement of the space is not the way the traditional layout used to be.

The notion of beauty in a built environment is important to study within the context of sensory aesthetics as well. This aspect has to be seen through the characteristics that are picked up by people's five senses and the moods that they are experiencing while they are within their surrounding environment. According to Lawson (2001) people's reactions, identifications or perceptions of a place are selected, shaped and coloured by what they have already known through the experiences throughout their lives. There are many differences between people's level of stimulation, their subjective perception of a place and the way that they interact with their environments. Therefore, the sensory aesthetic of the environment is perceived and understood differently depending on the individual.

Our findings in this study illustrate that the sensory aesthetic of the Plex environment was mostly associated with its visual quality and the way that people recall it. We already know that to understand the surrounding environment, amongst the traditional five senses, people are more dependent on sight and what appears before them (Tuan, 1974). The dominant visual quality of the Plex buildings in the context of sensory aesthetics with a special emphasis as to the legibility and imageability of this form of architecture, will be discussed later. However, given the many factors that affect people's perception of sensory aesthetics, our study demonstrates that

sensory aesthetics can evoke or impact feelings such as pleasure, relaxation, and enjoyment and can largely contribute to the residents' enhanced sense of place:

*"[...] I like to wake up on a nice gorgeous summer morning, sitting outside, having conversation with my husband, drinking a cup of coffee and just relaxing and enjoying and being happy when we have just finished the winter season and start enjoying our apartment. I'm very lucky that I have a front balcony. And I see a very nice big tree in front of it that makes a kind of semi-private [space] for me. [...] I also enjoy walking throughout the neighbourhood. It feels safe to walk there and I meet some people I know in between my way and we mostly have a short chat [...]."*¹¹⁷

This view seems to echo the sentiment that the appearance of the Plex environment is not separated from its function but rather central to it. For instance, the beauty of having a big tree in front of this interviewee's front balcony indicates the human-scale of the building in relation to the surrounding environment. It also reflects the impact of having a semi-private space on the enjoyment of the residential environment. Similarly, when she mentions the advantage of having sidewalks throughout the neighbourhood, it is because she feels comfortable to use them to walk down the street while she also enjoys talking with locals. In this study, none of the interviewees pointed to a disorderly place that contains unpleasant graffiti, litter or under-maintained places, which can cause a sense of anxiety or fear.

Our analysis suggests that young adult residents of Plex neighbourhoods also appreciated the symbolic aesthetics of this environment. According to Lawson (2001) no building can ever be entirely free of symbolic content, which refers to the pleasurable of the associational meanings of its environment. In this study we understand that young adults closely linked the Plex architecture to its prestige

¹¹⁷ 37 years old- Female- Lifetime's occupancy of the Plex environment.

values. The example below illustrates how for some young adults, living in a traditional architecture form like a Plex building is like being in a part of the artistic world that is highly prestigious:

*"[...] It feels really artistic to live in a 93-year-old building. This is as old as my grandmother [Laughing]. Anytime, I invite my friends to come and visit this place they tell me how much they like my flat. It is not just about my taste of design. The building itself has a prestige that we absolutely like. The floors are original, the closet doors too. So this building is really an antique one. The whole nostalgic sense of living here."*¹¹⁸

A number of our interviewees revealed that, being in the mainstream of Montréal's neighbourhoods, with a distinct style, which reflected the identity of the city and its mixed middle class population is rewarding and expressed the feeling that they belong to a social world personally acceptable to them. Aside from the economic issues, the Plex buildings seem to be associated with certain cultural tastes and views of the world:

*"I think the Plex buildings are like an ID card for Montréal. They have a history beyond these walls, a rich character. So many people lived here before us. Here feels like living in a diary. I still like this place because I am living with people who have different mindsets. I found that people are much cooler. I mean, if you are living alone or if you are gay or if you smoke or do something that looks bizarre, it is ok here. Not in so many other places in Montréal though! And the most important part is that I feel here people are more open to English speakers than some other neighbourhoods. Here we are all together a community. Even Verdunites are part of that community in a way. [...]"*¹¹⁹

¹¹⁸ 42 years old- Male- 4 Years of occupancy in the Plex environment.

¹¹⁹ 37 years old- Female- 4 Years of occupancy in the Plex environment.

Overall, it is very interesting to observe that despite the changes in the inhabitant generation of traditional Plex neighbourhoods, they nevertheless have been able to maintain the character of their own unique social environment. A significant retained character of this environment is that it encourages people to continue to engage in social interactions and to overcome certain manifest social status or linguistic boundaries. The next chapter will observe the social context of older established Plex neighbourhoods.

6.4 The imageability of the Plex buildings:

Montréal Plex buildings are symbols of the vernacular architecture existent within the city with its unique form, which was often referred to in the mental image held by our interviewees. Our findings verify that the physical form of a Plex does not just shape the way, which people move through it (e.g. *kids are able to play in the back-alley*” or “*the back balcony is so calm that I spend the most part of the afternoons there*”), but more that it creates a kind of visual quality, suggested by (Lynch, 1970) as ‘legibility’¹²¹, which is easy to identify by the residents. Although legibility is not at all the only remarkable feature of the Plex buildings, it becomes important in the context of analyzing the development of an urban identity, which these buildings serve as a broad frame of reference. The Plex’s legibility is indeed identifiable mostly

¹²¹ Kevin Lynch (1970) argues that an urban landscape is legible if it has the ease with which its parts can be recognized and can be organized into coherent patterns of identifiable symbols, districts, landmarks or pathways.

by the multiplicity of entrances, twisting staircases, balconies and porches that line a string of two to three-story houses in the neighbourhood street.

The following quotes illustrate that both local residents and visitors alike can determine the meaning of the Plex environment through its significant architectural characteristics¹²²:

*“A Plex for me? I think it is a particular kind of architecture, like Montréal’s signature, like a national identity. I am sure if you Google Montréal, a photo will pop up with those stairs and side-by-side balconies. If you go downtown, especially in the Old Port you will find lots of paintings or postcards of this type of buildings. It is like a souvenir of Montréal. I like their stairs and the galleries. I think these buildings are the mixture of history, architecture, beauty and people”.*¹²³

*“[...] Plex has its own history. These buildings are really old. For instance, in my flat there are features that have been built decades ago, especially the closet doors and the kitchen wardrobe or details of the ceiling. I think anyone who passes within Montréal’s older neighbourhoods will immediately recognize the predominance of these buildings. These buildings have a beautiful architecture. The monumental stairs and the front porches and oh, the balconies and the people around. These are the first things that come to my mind.”*¹²⁴

The last two quotes indicate that the age of Plex housings is likely to be associated with a measure of their imageability. This is because specific Plex buildings tend to reflect the architectural styles of the era in which they were built whereas they also deliver a symbolic meaning to the people.

¹²² These quotes are in response to “what is the first thing that comes to your mind when you hear the word ‘Plex’, what is a ‘Plex’ for you?”

¹²³ 33 years old- Male- 3 years of occupancy in a high-rise in Verdun- Comparison group.

¹²⁴ 38 years old- Male- 3 years of occupancy in the Plex environment.

In this study, the visual imagery of Plex's distinctive architecture and the imageability is derived from the historical ambiance generated by it, which is widely addressed by both young adult residents and those of the comparison group. However, the Plex' residents put a noteworthy emphasis on the social life developed in between residents of Plex buildings. It follows that the frequency of casual contacts on a daily basis between neighbours and the social context of Plex's shared spaces are the first things they recall from this environment:

*"Plex means hearing people all the time. Having their nose in your life. Well, to be fair, it is not that bad. So, let's make it this way, Plex is an old noisy building, with unreasonable outside stairs and balconies and a lot of neighbours out, so far as the weather helps.. You can't find such scenes somewhere else in the summer. People are living on their balconies, watching TV, listening to radio, working on their laptops, or [I don't know] talking with phone or to each other. It is life there".*¹²⁵

As we analyzed what young adult residents told us, it becomes clear that the social patterns of the Plex buildings can generate a sense of imageability as strong as the inherent physical features. For this interviewee as well as the previous one, the primary attribute associated with the Plex building is the feeling of social tolerance within the residential environment more than the physical attributes of the Plex itself. The interviewees are unconscious of the interchangeable attributes when their mind flows back and forth in between their perception of the social life of the Plex environment and its architecture:

"[...] The first thing that comes to my mind is a kind of flexible place to live. You can be yourself and you are accepted the way you are. You can be loud, you can be weird, you can have any lifestyle you wish, and it is ok. I never met homophobic people here. But you have to accept that people around are part of your life here. Sometimes even they spend hours on the stairs. We are hanging out there. We have our beers and we play guitar and we smoke together. It is fun. And I think Plex

¹²⁵ 39 years old- Female- 4 years of occupancy in the Plex environment.

*buildings are all in brick. I heard it was Scottish brick from World War II but I don't know why they brought it here".*¹²⁶

This part of our analysis comes close to those of Alexander's (1977) who exposed the theory that the character of the physical environment is given to it by the collection of patterns and the behavioural settings that are generated there.¹²⁷

6.5 Conclusion:

In this chapter we took a specific look into the physical features of the old established Plex environment that contribute to the higher levels of residential satisfaction amongst young adult residents. In doing so, we first applied the Lang (1994) model to investigate the roles of spatial needs satisfaction in developing the patterns of comfortability. It is suggested that the inhabitants may have an altered definition of comfortable housing and potentially perceived their residential place differently. However, in our analysis the common values and general preferences of young adults were more predominant than the weight that they played on distinctive expectations and specific preferences. Furthermore, we realized that certain physical and social aspects of the Plex's residential characteristics are more widely noticed and identified than others.

¹²⁶ 43 years old- Male- 7 years of occupancy in the Plex environment.

¹²⁷ An alternative approach has been suggested by Alexander (1977) to indicate the common patterns of behaviors and events that can be recorded as basic spatial configurations. This study points to the qualities of space that come from the repetition of similar patterns of behavior and argues that the desirable dimensions of human relationships with these patterns can overcome the undesirable aspects of the fixed architectural features.

We summarily ascertained that Plex buildings were generally perceived as residential places with low levels of metabolic and sonic comfort and occasionally as an over-stimulated environment. In addition, they were not suggested to be barrier-free environments for elderly people and those with physical disabilities. Yet, our interviewees expressed significant levels of residential satisfaction in the Plex environment. To explore the elements that foster such residential satisfaction, we addressed the notion of comfortable housing from both the physiological and psychological perspectives. In this part of the study we particularly used concepts from Lawson (2001), Gehl (1987) and Alexander (1980) to understand the spatial distance attributes on the transitional spaces and semi-private zones of the Plex buildings. We comprehended that architecture of the Plex buildings has a human-scale through which the residents will be unavoidably or intentionally placed in a situation of casual contacts or communication. Amongst the different elements of Plex buildings, the balconies are most frequently mentioned as the architectural factor which shapes social relationships between the inhabitants and affects the way that they interact with each other.

In our analysis we summarized that the Plex environment works well in response to the particular psychological and social needs of young adults amongst which is the sense of security and sense of being at home. The possibility of natural surveillance and behavioural control through the balconies, porches, and backyards, the orientation and the human-scale of Plex buildings, and the spatial flows from semi-public to semi-private deliver the appropriate sense of safety and security in the everyday life of the young adult residents. Young adult residents of Plex neighbourhoods were mostly satisfied with the experience that Jacobs (1961) refers to as 'eyes on the street'. While the comparison group mostly did not perceive the Plex neighbourhoods as a safe residential environment, our findings validate that for

young adults living in a Plex neighbourhood, it is felt to be a safe place with a very low crime rate or none at all.

In studying these aspects we widely used the Scannell & Gifford (2010) multidimensional model of place attachment to explore the different factors that contribute to the young adults feeling of attachment to the Plex environment. In the context of 'place-based attachment' we discovered that within the minimum three years' duration of residency in the Plex buildings, young adults develop a greater level of emotional ties to their environment. These emotional bonds were mostly expressed through putting much emphasis on the feeling of being comfortable in the Plex residential environment and the sense of 'at-homeness'. Besides the self-related aspects, the proximity to family or friends, the chance of getting to know the neighbours better and the increased local social interactions are identified as the most significant factors in developing such emotional bonds. Furthermore, the accessibility to the downtown, the proximity to various services and facilities and the presence of nearby parks and the riverside, all foster a greater sense of place and make young adults more attached to the Plex residential environment. The affordability of these neighbourhoods was mentioned as frequently as any other factor such as accessibility and a 'sense of security' in providing residential satisfaction and fostering a greater sense of place, therefore promoting a stronger sentiment of place attachment.

We also examined the 'heritage awareness' of young adults in older established Plex neighbourhoods. The results suggested that the residential mobility of the younger groups of the population into the traditional Plex neighbourhoods is accompanied with a redefinition and reinterpretation of the cultural heritage of this historical landscape. We understood that the old structures and materials of most Plex buildings make the renovation process inevitable and through this process young adults try to transform their flats into a more competitive and adaptable residential place.

However, our analysis showed that during the renovation process the symbolic and cultural attributes of the building are often mostly overlooked.

In the last part of this chapter, we examined the aesthetic aspects of the Plex's distinctive architectural form in terms of formal, sensory and symbolic beauty. Our findings confirm that young adults highly understand and appreciate these aspects of beauty with special interests in the Plex's craftsmanship and architectural details, its distinctive visual quality and the pleasurableness of the symbolic meanings and prestige of this environment. Likewise, we ascertained that Plex buildings have a distinctive imageability that is often expressed in the mental image held by young adult residents. However, the sense of place that the Plex environment delivers to young adults is noticeably intertwined with the social fabric of these old established neighbourhoods.

The following chapter shifts our attention on to the social fabric of the Plex environment and its impact on the sense of place and place attachment of these neighbourhoods amongst young adult residents.

CHAPTER VII

THE SOCIAL CONTEXT OF PLEX NEIGHBOURHOODS

Community and neighbourhood are often used synonymously in a vast part of the sociological and urban studies literature, which is not actually proper usage because the two terms represent different meanings. A neighbourhood is a physical entity and a community is a social one, therefore to claim that a neighbourhood is also a community requires a full analysis of the social patterns inside it. The concept of community in most past studies consists of three basic components, the presence of a shared territory, significant social ties, and meaningful social interactions (Kusenbach, 2008; Cuba & Hummon, 1993; Hummon, 1992; Jacobs, 1961).

Montréal is one of the largest multicultural Canadian cities, in which it is complicated to clearly define the communities' territorial variables and the strength of social ties within a highly dynamic often lost in virtual space society. Therefore, we put the most emphasis of this chapter on the third element of communities, i.e., meaningful social interactions particularly amongst the young adult residents of the old established Plex neighbourhoods. We will examine the Plex neighbourhoods as interaction spaces in which urban relationships develop. Within this perspective and in order to apprehend the everyday social lives of young adults in the Plex environment, we based our analysis on the notion of 'hierarchy of communities' (Kusenbach, 2008). The concept of 'hierarchy of communities' and its associated geographies have been examined in a variety of frameworks, yet it has never been linked to and discussed in the Plex environment.

In this research, we particularly scaled down our interest in the last two levels of the hierarchy of communities to focus on the social fabric of Plex neighbourhoods. We did a hybrid analysis of the Plex environment that starts on the scale of Plex residential buildings and extends to the social context of Plex street blocks and furthermore the neighbourhood as a whole. Following this framework, we aim to understand different depths of social interaction and relational intimacy in the Plex residential environment.

In our analysis we examined the 'proactive' and 'reactive' personal and social ties that are suggested by Low (2008) in the context of the older established Plex neighbourhoods. Our results suggest that in these environments, the social proactive involvements of residents are witnessed to happen more on the micro-settings level in which the residents may offer help or watch out for each other's homes or odd absence, etc.

The reactive interactions mostly occur at the street block level through helping a neighbour on request or reacting to a street crime or violation. Socializing and neighbour interaction in the Plex environment were suggested to be concentrated around people's residences (Laterreur et al., 2008; Hanna and Dufaux, 2002; Probyn, 1996; Hanna, 1986) and therefore the initial focus of our study was at the local level.

7.1 Frequency of contacts and social proximity in framing Plex local social networks

In Chapter four, we illustrated the concept of attachment in which the social dimension is suggested to be stronger than the physical ones. Scannell & Gifford (2010) indicate that people are more attached to places that facilitate social relationships and group identity. However, not all social relationships necessarily start with formal language and communication, e.g., a spatial language that expresses people's individuality and also their solidarity with others can very well form social relationships.

Our findings in the previous chapter indicate that Plex architecture offers a close physical distance within the adjacent balconies; the outside spiral stairs as well as the long narrow internal ones, and the distribution space of the halls. The multiple distance level that the Plex physical form offers on semi-private zones varies from less than a metre or so to about 1.2 meters and can extend up to 4 meters. Consequently, the Plex inhabitants move around, interact and form social relationships with each other through what Lawson (2001) defines as the influence of personal spaces. However, sometimes people are not necessarily conscious of the ways that close proximity in the Plex residential space forms and facilitates their relationships with other residents.

As an example, the quote below illustrates the immediate response to the interview question 'how much do you know your immediate neighbours and people around in the neighbourhood', the answer being 'not that much', when in fact the interviewee knew pretty much about her neighbours' lives:

*"[...] Well, here we don't have that much contact with our neighbours. We don't know each other. For instance, with my neighbour beside, only when we go out to smoke we do a little bit of chitchat about everything. Because he is a journalist so he is really up-to-date about the news all around the world. [...] And the one downstairs, she speaks Spanish and because of her new job she has to travel a lot to Mexico, and I'm Mexican so that made us come closer [...] and on the next door building, there is an old couple, very old and they are mostly sitting on their porch and they leave their door open so their cat decided to adopt us. I think the cat was the reason we started knowing each other. [...] Well, on the left balcony beside mine, there is a guy, that since his ex-wife left, he spent lots of time in his balcony and we met a lot so we talked and he told me the story, which is really sad because his ex-wife [...]. So as I said, here we don't know people that much. This is all I can tell you about my neighbours."*¹²⁹

As we can see here, once the interviewee flows back and forth in between memories, she talks about some personal topics of the neighbours such as their jobs, lifestyle or their personal stories. In this context, the physical proximity seems to be the primary factor in framing social relationships in between neighbours. Replying to the same question, another interviewee put more emphasis on the frequency of contacts that happens in the semi-private spaces:

*" [...] I think here we are living so close that for instance when we walk into our balconies, others acknowledge us long before we speak. What we wear, the manner of our walk, where we choose to sit and the way we look at each other [...] we can watch each other and we can even hear each other occasionally, so it is like living together in different levels. When the weather gets cold, we do not meet each other as often but still it happens that we call on each other for snow shovelling or stuff like that [...]. I think people know each other quite well, I mean after living here for a while."*¹³⁰

¹²⁹ 35 years old- Female- 4 years of occupancy in the Plex environment.

¹³⁰ 38 years old- Male- 3 years of occupancy in the Plex environment.

Eventually the more we analysed the daily routines of young adults in the Plex environment, the more we realize that most of them have a greater concern about their relationships with other people than to direct relationship with their residential spaces. However, our comparison study illustrates that in the high rise apartments young adult residents are effectively isolated in their dwellings, since they do not watch the neighbours coming and going. Moreover, they have no back yards or front porches over which to chat to their immediate neighbours. On the other hand, our young adult interviewees who live in single-family houses claimed that unless by an extraordinary coincidence such as arriving at their front door or driveway at exactly the same time as their neighbour, they might be in no contact with them for many weeks.

The most immediately adjacent social space for many young adults is provided by the balcony, porch and yard through which they foster proactive relationships with their neighbours. However, as a result of small sizes and close proximity to the sidewalks, these semi-private spaces are occasionally suppressed by frequent contact with 'passers-by'. Yet, our interviewees talked about these 'passers-by' quite often as 'familiar faces living around', 'people I know' or just 'neighbours':

*" Now after a while I think I know some people. I don't know their name, but I know their faces. Here it is easy to flow in and out. It is easy just to 'pop out' to see what is going on and if there was nobody to talk to or nothing you wish to do, it is easy to go in again. Throughout the day the neighbours move back and forth between the buildings, front yard and sidewalk. Some plexes have tiny gardens that await occasional gardening. And I think here we have freedom of choice between staying on the public side of the building that face the street or the sidewalks or to go on the private side on the backyard. But whatever your choice is, you will see a couple of your neighbours, most of the time. "*¹³¹

¹³¹ 39 years old- Female- 4 years of occupancy in the Plex environment.

The frequent sharing of space in the Plex buildings, the front sidewalks and occasionally the back alleys make these spaces catalysts for active interaction amongst neighbours. We assume that a part of this social convenience in the Plex environment, stems from the 'medium' number of people in these spaces, which Hanna and Dufaux(2002) refer to as 'medium density'. Our findings within the comparison group indicate that our interviewees who live in condominiums quite often are not interacting with their neighbours. According to what they said in the interviews, having to deal with too many others in a limited space and the social overload in their high-density residential environment are the main reasons for the social constraints in their high-rise buildings. In contrast, our Plex interviewees seem to establish control over their interactions, the number of people with whom they interact with and relatively over when and where this interaction occurs. Although, a few of our interviewees were concerned about privacy issues, in general they explained that the number of potential encounters with others is as many as they desire. Thus, they don't feel forced to limit their involvement with 'others' who are living around them and can instead confine their attention to a limited number of primary relationships:

*"[...] Before, I used to live on the 18th floor of a high-rise building and I think there were about 13 other apartments on the same floor. So **imagine anytime I was taking an elevator there was a chance to meet other people that I didn't know.** [...] Here I can hear people on the adjacent balconies or when they are out in the back yard. So if there is a moment that I am not in the mood I will not go out [...], I think it is good to live in a place that pushes you to get to know at least those who live around and notice if they are absent for a while. A good neighbour could even be like an extended member of a family. [...]."*¹³²

¹³² 37 years old- Female- 4 years of occupancy in the Plex environment.

It is clear that people do not all always wish to engage socially with others. Our findings indicate that the proximity and frequency of contacts in Plex buildings are sometimes considered disturbing and inconvenient.

“ [...] There is nothing more disturbing than knowing that someone is looking in your direction and yet, because you are not facing them, you cannot tell if they are looking at you. I mostly turn my couch in a way so as to skip facing the front sidewalk and the street. I don't have an outgoing personality. I don't like socializing with people I don't know. When I am out and my neighbours are coming out, it is a kind of bothersome moment for me even though we never talk or hang out. I think they find me weird. I don't care, but it is uncomfortable anyway because we all sit so close.”¹³³

It could be argued that part of the inconvenience that is described by this interviewee is the result of unclear boundaries in which ‘my space’ and ‘your space’ cannot be easily defined at least with regards to visual and sonic privacy. By using elements such as individual seats in the front porches or balconies, moving the possessions into the back yards or keeping eyes on the street, young adults try to create their own individual territory.

We discovered that young adults form their own territories for a conversation simply by the way they sit on their balconies relative to each other. These territories last for as long as the conversation advances. Alternatively, their defensive behaviors might be just to turn their seat in a particular direction to avoid or ignore those who pass by or are around on their balconies. Personalized or defended territories in Plex neighbourhoods not only provide control but they also give people a greater sense of place and belonging to their environment. Thus, presence in semi-private (e.g., sitting

¹³³ 42 years old- Male- 3 years of occupancy in the Plex environment.

in the balcony) or shared areas does not necessarily imply willingness to interact. This willingness could often be assessed by considering other behavioural cues.

7.2 Sense of community, community ties and social fulfilment

Outdoor places that provide an opportunity for people to gather around and chat are defined as ‘sociopetal spaces’¹³⁴ that can greatly enrich urban life (Lawson, 2001). In this research, we discovered that Plex buildings and the kind of ambiance they offer are prime and much-frequented examples of such ‘sociopetal spaces’, which catalyze social interactions between the residents. None of our interviewees expressed discomfort with their residential environment nor failed to report participation in animated conversations throughout the balconies, back yards or the front porches, especially during the warmer months of the year. However, this aspect may also be attributed to the general social values and lifestyles of those who choose to live in Plex buildings and consequently exert some social control over the semi-private spaces of it as well. The example below illustrates, how the physical characteristics of the Plex neighbourhoods appear to play a strong role in the development of community ties and sense of community:

“ [...] I think it is not about people who live here. They can be anybody. But it is a kind of lifestyle here which is different than downtown. There is something about this place that makes it more relaxing, more, easy going. For instance, I am mostly spending time on my balcony on nice sunny days in the spring or summer. Both my neighbour and I have time to spend on our own but still share some moments

¹³⁴ According to Lawson (2001), the term ‘sociopetal’ refers to the spaces, which tend to draw people together. This term was first used by Osmond (1959) who also coined ‘sociofugal’ spaces for the spaces, which tend to throw people apart. However, as Osmond (1959) explains, whether a space is designed to be ‘sociopetal’ or ‘sociofugal’ is not simply a function of the broad building typology but a matter of style. By this means, those who repeatedly choose to gather in a particular place are identifiably close in lifestyle, social or ethnic background.

together. And when I see people out, cheering for a hockey game or drinking beer together, I am encouraged to go out too. It's like a magnet."¹³⁵

When we asked young adults about their experience of living in the Plex neighbourhoods, they mostly noted feelings of 'neighbourliness', 'togetherness', 'friendship', 'community sharing' and 'acceptance'. Encouraged by the position and architectural features of Plex buildings, there is a high opportunity for passive contacts to occur amongst residents. These frequent passive contacts that result in a high familiarity with others' routines are a key factor in the development of close social ties in the Plex buildings and their shared spaces on a micro-setting scale. The following quote illustrates how young adults perceive casual contacts and their effect on developing social patterns between residents:

" [...] Even now, how many times that lady came out to smoke and then again with her phone? And I bet she will be out again in a couple of minutes. [Laughing] and one of these times we have to say Hi. In my opinion here the architecture obliges you to have social contact. You can't skip it. Even if at first you don't like to be one of them, you will be later. I mean if you spend a summer here then you will be pushed into that network. I don't say that you will be friends but you are in kind of a connection. At least we all are belonging to this block. We know each other."¹³⁶

Consequently, most of the young adults that we interviewed were well familiar with the other people in their building and many had developed a degree of friendship with some other residents, oftentimes next-door neighbours or those living in the floors above or below. As we note in our analysis, Plex inhabitants use doorsteps and outdoor communal areas as extensions of their limited living space in order to relax, smoke, drink, eat, read, fix something, talk on the phone, socialize or practice for an

¹³⁵ 35 years old- Female- 5 years of occupancy in the Plex environment.

¹³⁶ 39 years old- Female- 4 years of occupancy in the Plex environment.

audition often within view and earshot of their neighbours. Such high visibility of the private and semi-private lives of Plex dwellers is a key factor in making the Plex environment an open, amicable and flexible residential place, exposed to different lifestyles:

“ [...] My friends used to call it ‘Verdump’!. [Laughing] and that was pretty much my first impression. Smelly, gross, low-income people on the sidewalks smoking, drinking, they look poor. But after I spent some more time here, it all changed. Generally speaking, I found people very friendly. And it was really encouraging the very first month that I moved here, because I didn’t know anybody. [...] Here, our lifestyle is not the same but we accept each other. For instance, they know that I smoke pot or I am listening to my music loud but its ok with them and I know they have little tweens and a big dog barking most of the time and its ok with me. We are in a kind of non-verbal agreement, like ok this is my limit and this is yours and we try to get along as much as we can. Maybe it is a culture to know your neighbour here. But anyway, they said love your neighbour and yet don’t pull down your hedge. Right?”¹³⁷

Our interviewees explained how their neighbours greet each other in ways that present both respect and friendliness. What they selected in the interviews confirmed the Kusenbach (2008) argument about proactive interventions within the micro-setting of a community scale. The requests for favors such as providing a needed item or watching over each other’s plants, pets and home, for a limited period of time are some of the most significant proactive interventions, which our interviewees talked about:

“In this neighbourhood, I know some immigrants who do not have any family or close friends living around. So I think it is good that this architecture doesn’t let them be completely isolated on their own. They can watch others reading, relaxing, chatting or like my next-door neighbour who mostly plays guitar. There is life around them. [...] This is the routine here. If I were to see something odd at my next-door

¹³⁷ 38 years old- Male- 3 years of occupancy in the Plex environment.

*neighbours for instance, I would investigate. I would investigate for anyone here! And I believe that they would possibly do the same for me. I do think there's a sense of community. At least in this block I am assured of that [...]."*¹³⁸

By 'investigating' the interviewee was referring to inquiring without being asked to do so. She expressed likelihood of a similar response by anyone in her building and that she believes that others would 'do the same' for her. This emphasizes the shared "sense of community" that unites the residents of her Plex building as well as those in the next ones.

Although our study is not gender-based, we note that gender is a personal characteristic that directly modulates the type of the proactive interventions in between the neighbours. Our study revealed that women provided more emotional aid, companionship, child minding and help with the domestic routines than men. The example below illustrates how our male interviewees seem to occasionally provide services such as helping other neighbours in maintaining their homes or cars, and more often in snow shoveling and domestic management:

*"In winter there is a lot of snow shoveling to be done, and I am not that fortunate because I'm the only man in whole triplex so I'm expected to do all of the shoveling of the front and back every snow fall, plus the balcony of the 83 year old lady on the top floor, which accumulates a huge amounts. I am also in charge of her garbage too, because she can't do it anymore [...]"*¹³⁹

Another interviewee describes the relationship with her three closest neighbours in the following way:

¹³⁸ 38 years old- Female- 7 years of occupancy in the Plex environment.

¹³⁹ 42 years old- Male- 3 years of occupancy in the Plex environment.

I know my neighbours here. They're very nice. We protect each other. Do we socialize? No. But we're neighbours! And we'll help each other if we need to help each other. We are very good neighbours, but as far as being close friends, well, I wouldn't go that far."

Remarkably, it appears that the living experience in Plex environments changes the very definition of the word 'neighbour' and its expected implications in the minds of Plex residents. As is shown here, being a good neighbour within the Plex micro-setting scale basically means to 'protect' and 'help' each other when needed. Interestingly, the interviewee does not consider 'socializing' a necessary component. In addition to the terms 'investigating', 'protecting' and 'helping in need', many of the young adults that we interviewed described the same attitude towards close neighbours using expressions such as 'looking after', 'watching out for' or 'taking care of'. While some of our interviewees within Plex' micro-settings tended to be more closely linked than others, all are expected to treat each other with a certain degree of care and respect. Our analysis shows that despite the diverse racial, religious, cultural backgrounds, and household types, young adult residents of Plex buildings frequently develop social ties with other residents via shared interests, familiarity with each other's daily routine and proactive helpfulness.

7.3 Street block, street life and social context of Plex neighbourhoods

The casual relationship networks that result from residential proximity and shared routines of Plex buildings are extended to the facing blocks and the street life of the Plex neighbourhoods. Although, the casual contacts and social interactions with the next-door neighbours most often play a strong role in developing the sense of community for young adults, we observe that 'social interaction' on the

neighbourhood scale does not appear to play a significant role in improving this sense of community amongst young adults. Instead, our analysis suggests that it is the existence of 'eyes on the street' phenomenon (Jacobs, 1961) on the immediate block, in addition to the extension of casual contacts for the several blocks in each direction that helps develop a sense of familiarity with the environment and provides security for the residents which makes them socially attached to their residential neighbourhood. Most of our interviewees referred to the 'rhythm' of their residential streets as the greatest thing about living in Plexdom. According to them such rhythm comes from the residents' interaction, balconies filled up with people reading, relaxing or just watching passers-by and the diversity of the people who live around them. An example below indicates how young adults perceive diversity on their residential environment in the Plex neighbourhoods:

*"[...] Well, my neighbours are cool. What do I mean by cool? Well, here people have different mind-sets compared to those who live in suburbs, for instance. They are ok with different people. They accept the differences. Any ethnicity, any religion is acceptable here. I never hear that there is any kind of problems like this in our neighbourhood and they are really open to non-Francophones and immigrants. So I think it is a good mix here in our neighbourhood and we deal with each other really good."*¹⁴⁰

Our analysis indicated that most of our interviewees share the general concept expressed by the residents above towards the Plex neighbourhoods. Oftentimes, these neighbourhoods are referred to as friendly and open residential places for a variety of people and their differing lifestyles. This quality reflects the heterogeneity of the Plex neighbourhoods which is more apparent through the social scale of Plex' buildings and their physical orientation towards the street.

¹⁴⁰ 43 years old- Male- 7 years of occupancy in the Plex environment.

The high visibility of 'others' in the semi-private spaces fosters formal or informal opportunities for social relationships. These relationships include neighbourly and casual social encounters and occasionally take the form of community support. Young adults mostly describe their 'casual interactions' in day-to-day life with other residents from different backgrounds as the starting point of their social attachment to the Plex neighbourhoods. We concluded that casual, informal contacts nurture their feeling of acceptance by others within the Plex environment and lead to a greater sense of belonging:

*"In my previous place, people were sort of homogeneous. In terms of lifestyles and jobs and incomes and family status. But here they are all kinds of people living around, families who were living here for generations, young students, young couples, single ones, I mean different people. And when one moves out, you don't know who may come and replace him. I like my kids to grow up here. They will learn how to deal with different people. I think living with different people and being a part of a social network is good for their future too. It will improve their social skills. It will improve their social tolerance [...] Here people care about their block, about their neighbours and I think this is a good start for my children to learn it [...]."*¹⁴¹

This passage seems to show that the heterogeneity of the Plex neighbourhoods facilitates the harmonious interrelationships amongst the neighbours and promotes a sense of openness to many different kinds of 'others'. Although some studies discuss the ongoing decline of a sense of community, decreasing rates of participation in social interactions, and an increase in individualistic behaviors (Prezza, Amici, Roberti, & Tedeschi, 2001; Stedman, 2003), our study shows that in the Plex environment of Verdun specifically, there are no extreme divisions between diverse groups of residents which undermine social cohesion.

¹⁴¹ 38 years old- Female- 7 years of occupancy in the Plex environment.

In fact, none of the interviewees in this study reported a significant tension amongst their neighbours, although they are living with people of different backgrounds in terms of age, ethnicity and socioeconomic status. Moreover, in our analysis we discovered that in contrast to some other neighbourhoods where people travel all over a city to fulfill their needs, the Plex neighbourhoods of Verdun serve as the primary source for fulfilling the most day-to-day needs that are suggested as being important to residents. Shopping, socializing and recreational activities are suggested services that are concentrated within these Plex neighbourhoods. Importantly, when we mention 'shopping' in local Plex neighbourhood shops we are referring to an experience fundamentally different from the department-store-style shopping. In the first example below, we can see how the frequent use of local services with familiar shop owners/staff develops a kind of social attachment towards Plex neighbourhoods for young adults:

*"[...] Oh, Wellington Street is really alive, especially at Christmas time, with all those lights on the trees and stores full of people and busy sidewalks. Last year we did all our shopping here. We didn't even need to go downtown. [...] And my kids like the local stores, especially because they know where to find their favourite stuff. They know the stores like the corner of their pocket [laughing]. And those guys in the game store, they know my son because he is there almost every week. My son doesn't like to go shopping somewhere else."*¹⁴²

The following example indicates how the concentration of activities within the Plex neighbourhood increases the formal and informal opportunity for social interaction amongst residents as well as small local businesses:

" [...] Here, there are a lot of interactions between neighbours. I think one reason is

¹⁴² 38 years old- Female- 7 years of occupancy in the Plex environment.

that after seven years we become kind of locals here. We know our neighbours and they know us and sometimes we do stuff together. Like we both have babies so sometimes we put them in strollers and we go for a walk to the park, which is not far. We borrow things, we talk, we joke, and it is like a very active life in between neighbours. We do our daily basic things here and we know the small businesses around [...] In general, I know the owners. I don't know the tenants because they are changing a lot. I know the owners since I was here. But the lady next door that I told you about, well, she is a tenant. So I know both groups. I was wrong."¹⁴³

7.4 Adaptability to the Plex lifestyle

Human behavior is highly adaptable. People can learn to perform better based on their formal education, the realization of the results of their actions, and from the inner satisfactions they derive from the act of learning itself (Maslow, 1954). Accordingly, the built environment can be adaptable in a dual relationship with the inhabitants. The particular features of the built environment may change to promote desired behaviors. Furthermore people may adapt their behavior to cope with the environment as it is (Lang, 1994). Through the process of adaptation to the built environment, physical patterns may be adjusted and new social structures may be created.

However, according to Lawson (2001) if the adaptation process does not happen through a self-selected situation, it might be accompanied by physiological and psychological stress. Yet Lang (1994) notes that any departure from what people are used to is likely to be stressful, especially if the new patterns distort the past memories of the space and affect the way that people recognize the environment in the future. According to Lang (1994), people may respond similarly to many

¹⁴³ 38 years old- Female- 7 years of occupancy in the Plex environment.

situations, however in general their attitude toward an environment consists of their perception about the associative characteristics of it and the values toward those perceptions. Values are related to the circumstances in which the environment is viewed and the inhabitants' expectations, purposes and moods.

Our analysis indicates that having outdoor common spaces does not single-handedly promote social ties within the Plex environment. Instead it is the physical style of life in the Plex environment that encourages connections to take place with others. We ascertained that Plex neighbourhoods promote their own lifestyle to the residents, which is accompanied with a noticeable adaptation of young adults in this environment. This adaptation can be traced both towards the spatial features of the Plex environment and to its social fabric. In the previous chapter we evaluated the particular sonic environment of the Plex neighbourhoods. Our findings suggest that living for a while in Plex buildings has a great impact on the levels of spatial stimulation for young adults, specially on their adaptation to this particular sonic environment and occasionally to the over-stimulation of noises in between the flats. This interviewee reflected on how young adults have adapted to the Plex sonic environment:

*" [...] I hear people and I feel them around me and I think if they are sitting there in the back they are probably listening to this conversation. It might not be clear in the sense that they are not right besides us but they can hear the voices completely. At the beginning, the worst thing for me, here was to hear my neighbours, walking and talking and even sometimes I hear them making love. But then after the first summer I realized something. Here, people don't seem uncomfortable to be heard. It is like if they decided to stay, by default they accept it. They wouldn't even bother to lower their voice. I don't like this part of the summer in the neighbourhood but I got used to it. Well, you have to take it or leave it and it's my 4th year here, so it seems that I take it [laughing]. "*¹⁴⁴

¹⁴⁴ 42 years old- Male- 3 years of occupancy in the Plex environment.

The adaptation to the Plex lifestyle is also accompanied with enhanced levels of tolerance to the aforementioned frequency of contacts, casual interactions (mostly with the next-door neighbours) and neighbour diversity. The adaptation process is not limited to the young adults who choose Plex neighbourhoods as their residential places, but also to those who were born and raised in these old established Plex neighbourhoods. The Verdun native-born interviewees of our study call themselves 'Verdunites', which indicates that they are referring to their childhood neighbourhoods as part of their personal and social identity. The 'Verdunite' interviewees seem to be getting well adapted to the changing fabric of their old established Plex neighbourhoods in Verdun that have witnessed a long period of gentrification:

*" [...] We are Verdunites, we even have our facebook page for local people to share their stories of the neighbourhood and to share their childhood photos or the photos of their old houses or an old café [...] How many people I know here? You've better ask me how many people are new here. I know so many of these stores on Wellington from years ago. The shops that closed and reopened again and the owners who died and their kids who left, and so many other stories. But I noticed that Verdun changes throughout the time. Well, it is sad because so many Verdunites have left to live in an upper class neighbourhood. But I prefer to fix things in my old flat and stay and enjoy my neighbourhood. And I like to see young people move in here. I think the more that cultural diversity flourishes, the more a neighbourhood improves."*¹⁴⁵

Our analysis shows that local young adult residents of traditional Plex neighbourhoods are most notably learning to live with cultural diversity that the gentrification process applies to their residential environment. They understand that the affordability, accessibility, the perception of neighbourhood safety, and the vernacular fabric of Plex buildings have attracted new groups of young adults into these neighbourhoods.

¹⁴⁵ 41 years old- Female- 41 years of occupancy in the Plex environment

However, our findings show well-managed cultural exchanges amongst Verdunite young adults and the non-local young adult residents. In this study, the variety of lifestyles, the cultural background, ethnic diversity and particularly linguistic differences are not found to be major obstacles in developing social networks or as a factor in creating tensions between neighbours. On the contrary, in many cases these differences have very well become a source of attraction in the neighbourhood. The following interviewee is one of the local young adults who summed up the adaptation to the neighbourhood changes with the word 'ghetto':

*"Obviously, Verdun is not a ghetto. This is not a Francophone neighbourhood or an English one. We have all different kinds of people and the neighbourhood belongs to all of them. People choose this neighbourhood and we know that we have to accept each other. Well, here we are living in close distance and we have to handle our neighbours. They are part of life here [...] I like the diversity of the neighbourhood when I go out for a walk and I see moms with their kids and at the same time young people hanging out on their balconies and smoking or old people sitting on their porches."*¹⁴⁶

Living long enough in the Plex mixed areas also seems to influence those young adults who expressed initial intolerance to interact with the diverse fabric of the Plex neighbourhood. It seems that simply seeing people interacting positively with each other is helpful to improve tolerant behaviors not just in individuals but also throughout the entire neighbourhood. On the other hand, our analysis indicates that in the Plex neighbourhoods, neighbour conflicts are most often about noise.

Less commonly, complaints are about smoking pot in semi-private spaces, or property management disagreements. It is noteworthy that everyday forms of conflict in the Plex neighbourhoods are oftentimes addressed and resolved in a respectful

¹⁴⁶ 37 years old- Male- Lifetime's occupancy of the Plex environment.

neighbourly fashion, such as directly knocking on neighbors' door and dealing with the issue. On the contrary, our interviewees in the comparison high-rise building group mention that they typically deal with neighbour conflicts by calling the police. The two following examples below reflect how young adults react to the neighbours conflicts in different kinds of residential areas:

*" [...] Here, it is not quiet, but peaceful. The neighbour upstairs has two little kids that sometimes are really annoying. Well, the problem is not the kids but their parents who let them run wild. Yes, I had complaints for their loudness but no police were involved. First, I asked my landlord and then I knocked on their door and told them to be quiet, but still lots of problems. But I can't call the police. Not like I can't but I don't want to. Well, we are neighbours. We are living here together and it is not nice to do so. Anyway, I think this is not a big problem to call for the cops or fight over. Well, anywhere you go, something is missing. No one is perfect. [...]"*¹⁴⁷

*" [...] Some people are troublemakers so if they happen to be your neighbours, they could be a source of conflict and problem. So it is better to be careful about your neighbours. I personally never had a serious problem with anyone in this building but if ever something happens, I will call the police. I never knock on their doors. I think it is not safe to face the conflict in person and it may create more problems. I don't know who is living next door. What if they were aggressive? But when the police are involved it looks legal and I think it is more effective."*¹⁴⁸

The last quote hints at the ambivalent feelings that people can have about their neighbours on a high-density residential area where residents most often avoid casual contacts or social interactions with their neighbours. Both last two examples specify that conflict with a neighbour make people feel uncomfortable or even unsafe in their own home. However, in contrast to what the high-rise residents articulate as 'legal solution' to the neighbor conflicts, the Plex residents appear to feel safe to agree and

¹⁴⁷ 39 years old- Female- 4 years of occupancy in the Plex environment.

¹⁴⁸ 43 years old- Male- 7 years of occupancy in a high-rise building.

disagree with each other. They seem to be interested in overcoming the challenges with minimal use of external forces. The behavioural change on the maintenance of privacy among young adults in the Plex residential environment is another aspect of adaptation to the Plex lifestyle. At the basic level, access to natural daylight and fresh air are fundamental aspects of livability in a residential place (Lang, 1994) and so is privacy from adjacent dwellings and overlook. Loss of residential privacy, especially in terms of invasion of visual and sonic privacy can make residents uncomfortable.

In this study we discover that the physical features of the Plex architecture including the placement of windows, back and front balconies and outside staircases regulate visual privacy between Plex residences. Our comparison group most often perceived the Plex features like porches, balconies and outside staircases as qualities that can add visual bulk to the overall appearance of the building and at the cost of creating conditions that seem to undesirably impact the privacy of nearby resident. According to a high-rise resident:

*"[...] Even if I use my balcony and someone watches me that would be from far. And there is cement wall in between of balconies so people can't see each other [...]. One reason I don't like Plex buildings is that there is no privacy. People are sitting so close on the balconies that are exposed to the street. You can easily watch them. I don't feel comfortable living there."*¹⁴⁹

Conversely, our findings indicate that young adult residents of Plex neighbourhoods most often do not feel that their privacy is compromised by the visibility of balconies, porches and outside staircases around. Likewise, our interviewees seem to generate a greater level of tolerance towards the poor insulation of the Plex buildings that interfere with the required sonic privacy of the inhabitants. The following passage is an example of young adults' privacy related issues in Plex environment.

¹⁴⁹ 35 years old- Female- 5 years of occupancy in a high-rise building.

“ [...] What you mean by privacy? You want to skip people? Not to hear you? Not to talk to you? Not to watch you? Here it is very difficult to have that lifestyle. Even if you are very into yourself [like the Chinese girl upstairs], still people know something about you. For me if it were just the neighbors I knew, who were looking at my balcony I wouldn't mind at all. I am OK with my neighbours and I think they feel comfortable with me too. But there is a community center on the other side of the street and those shops and the traffic of this commercial that are not living here and it is a little bit disturbing when those strangers watch me.”¹⁵⁰

This passage seems to show how with the progress of time the perception of privacy has changed for the Plex resident. As it shows, people are accepted as the inseparable parts of the visual and sonic landscape of the Plex environment. This perception goes so far that the interviewee used ‘living in isolation’ to describe using the semi-private spaces without being overlooked or overheard. What struck us here is that the interviewee does not indicate any problem to be heard or overlooked by ‘the neighbours she knows’. Through this passage we could once more trace the community-related dimensions of living in a Plex environment. Before, we mentioned that the frequent passive contacts in the Plex shared spaces help to develop close social ties in between residents. Now, it stands out that it is such high familiarity with others that results in the feeling of ‘neighbourliness’ being one of the main factors in the privacy maintenance behavioural changes of the Plex residents.

7.5 Conclusion:

This chapter reviews the social context of old established Plex neighbourhoods from different perspectives. Our analysis of socializing and neighbouring starts from the

¹⁵⁰ 38 years old- Female- 6 years of occupancy in a Plex environment.

scale of Plex residential buildings and extends to the social fabric of the Plex neighbourhood.

In sum, we realize that close proximity in the Plex residential shared spaces is the primary factor that forms and facilitates formal and informal social relationships amongst neighbours. Analysis of the daily routines of Gen Xers in the Plex environment indicates a noticeable sense of community amongst the Plex' inhabitants. Such a feeling is arguably grounded in the frequency of passive contacts that promotes high familiarity with 'others' in Plex medium-density housing space. In our study we faced different examples of proactive patterns of neighbouring amongst the Plex residents and their concern about relationships with other neighbours.

The architectural form and features of Plex buildings in addition to the rich diversity of the residential environment of Plex neighbourhoods encourage a particular lifestyle. We ascertain that living long enough in a Plex drives young adults to adapt their behavior in order to cope with the Plex's specific physical and social environment. We recognise that the residents have a limited control over the visual and sonic landscape of the Plex buildings. Moreover, there is a lack of a clear boundaries to define their own individual territory on the shared and semi-private spaces. Yet, this study discovers a clear behavioural change over time on territorial and privacy maintenance of young adult residents and their level of tolerance toward neighbourly conflicts.

If we understand tolerance as the ability to exercise a fair and objective attitude towards those whose opinions, practices, religion, nationality and so on differ from one's own, we can argue that Plex neighbourhoods are the types of residential areas that are a model to pursue in order to encourage further tolerance between different groups of residents. This could foster an urban environment in which inclusion rather

than exclusion is the focus of the lifestyle. We conclude that such behavioural changes are a direct result of adaptation to the Plex lifestyle, which in general is perceived as a friendly, open and socially positive one.

CONCLUSIONS

Plex housing phenomena, made up traditionally of duplex and triplex flats, offer accessible, affordable and flexible housing sought by different groups of residents. In Montréal, Plex buildings, heavily cover an urban area encompassing some 4,000,000 people. Even the suburbs, where six-plex and eight-plex condos are hugely popular today, have areas of duplexes and triplexes stretching back to the 1950s. Although there was a significant weakening of this architectural tradition in the 1950s and 1960s due to the heavy subsidization of single-family housing, it came roaring back once those subsidies vanished in the 1980s. Plexes still stand out as an outstanding symbol of the success of vernacular architecture in the development of Montréal, one of the few cities in the world with a prevalence of this type of architecture, alongside perhaps Chicago and Edinburgh, which serves as a significant part of its urban identity (Hanna and Dufaux, 2002; Marsan, 1990; Hanna, 1986). Yet, the unique values of the Plex architectural environment and the human interaction with this particular residential setting have been neglected in most of the related literature.

The process of gentrification and youth residential mobility have changed the social fabric of the traditional Plex neighbourhoods into ones which are more heterogeneous. However, a closer examination of the social values inherent in Plex housing has also been lacking. Such a surprising absence of studies about Plex housing contributes to the originality of this research. Considering the unique urban landscape of Plex neighbourhoods, this research addresses gaps in the literature on Plexes and the new residential patterns of older central neighbourhoods of Montréal. Applying the 'human-place relationship' theories in the context of old established Plex neighbourhoods of Montréal has not to

our knowledge been previously attempted. Furthermore, this research contributes to the field of urban studies by delving into the impact of the Plex architectural form on the residential satisfaction of young adults. Additionally, this research explores the particular social networks within the Plex environment, the evaluation of 'sense of place' and 'place attachment' therein, and young adults' future aspirations towards continuing their residence in this type of urban environment.

Thirty-six years after Fenarrio's (1979) 'Balconville', this research examined the way that the English-speaking young adult group of residents experience the traditional Plex neighbourhoods of Montréal. More specifically, this research analyzed and explored Plex residents' 'sense of place' and 'neighbourhood attachment' in Verdun borough of Montréal (Québec, Canada). The social fabric of these neighbourhoods has changed and the traditional hard line of linguistic separation between the English and French peoples has been diminished. Nevertheless, the traditional Plex neighbourhoods continue to represent the viable urban spaces of a convergence, where the social relations and togetherness that Fennario (1979) described are formed and enhanced.

This study was conducted with English-speaking, young adult residents (aged between 29 and 45 years old) who have lived in Verdun's Plex neighbourhood for at least the past three years. In order to explore the ways in which English-speaking young adults construct the character and sense of place in the Plex residential environment, we examined its physical and spatial spaces as well as the existing social interactions. The results of analyzing semi-structured interviews with Plex residents reveal that despite significant social changes through time, the Plex type of housing still generates a strong 'sense of place' for its residents.

The popularity of these old established neighbourhoods stems partly from the affordability, accessibility, the variety of housing types, and the possibility of renovation that they offer. However, our study proves that Plex buildings are also able to fulfill the young adults' personal needs and social expectations of a residential neighbourhood environment. Compared to Baby Boomers, Gen Xers are suggested as not being strongly loyal to any one job or place that does not meet their expectations or incorporate their dissatisfaction (Coupland, 1991; Salt, 2004; Williams et al., 1997). However, the Gen Xers in this study express a high aspiration to stay in Plex neighbourhoods. This research confirms that residential satisfaction in the Plex environment fosters a strong sense of place and place attachment towards their residential environment.

We noticed that the phrase 'feeling comfortable' is the one most often used by young adults when they are talking about their residential satisfaction in the Plex environment. To understand the notion of comfortable housing in the Plex environment, we first analyzed the way that it responded to the spatial needs of young adults. This qualitative research ascertained that the Plex physical form, features, and spatial arrangement have a positive suggestive impact on young adults' level of residential satisfaction. In response to the concern about the extreme winters of Montréal, young adults find that the stacked dense arrangement of Plex buildings and their front and back orientation are fairly appropriate for retaining heat. In addition, the medium density, the more personal human scale, the hierarchy of transitional zones, and the various forms of ownership available are highly appreciated aspects of the Plex environment.

It is confirmed that a certain degree of safety and security are required in order for residents to generate a positive sense of place and thus place attachment and our data

confirm that the Plex environment favorably responds to young adults' sense of neighbourhood safety and security. In the Plex environment the possibility of natural surveillance through the hierarchy of transitional zones provides visual and behavioural control of threats from the 'outside'. This factor along with the repeated casual contacts with neighbours, which creates closeness and familiarity with 'others', respond well to the safety and security needs of young adults. On this scale the residential satisfaction of young adults improves their human-place relationships in the Plex environment. Our findings confirm that young adults are most often satisfied with the experience of spatial flows from semi-public to semi-private spaces and the probability of natural watchfulness and safe control of their residential environment. All aforesaid attributes of Plex types of housing generate an increased level of personal comfort and 'at-homeness' for these English-speaking young adults' subjects interviewed.

The imageability of Plex buildings and the collective social memory of Plex old established neighbourhoods promote a greater sense of identity both for the place and among its residents. Our research validates the impression that Plex buildings are generally appreciated as heritage properties in the city, which symbolically represents this heritage landscape with tourist postcards, pottery façade souvenirs and paintings. However, through the renovation process, young adults oftentimes attempt to transform their flats into more compatible and adaptive residential places for themselves. Consequently, residents who are living in a fully renovated Plex building signified the highest level of residential satisfaction. Indeed, features such as spiral stairs, which people without physical disabilities take for granted, can present some serious problems for those with different physical limitations. The absence of a ramp and a lifting system in Plex buildings, and the long internal stairways are huge barriers as an ultimate residential choice for a candidate of this type of housing who has problems with mobility.

Moreover, these old Plex buildings mostly have poor insulation and improper ventilation. Although our study confirms a partial or full renovation process of most flats, the insulation of the Plex buildings often remains inadequate. Young adult residents frequently complain about cold walls and floors, uneven heating levels within the buildings and the high heating costs in the winter. But they also complain about the high cooling costs in the summer and ineffectiveness of air conditioning systems. The poor sound insulation of Plex buildings also results in an over-stimulated sonic milieu experience of noises of from the neighbours, over which residents have no control. In wintertime, the slippery outside stairs, especially the spiral ones, portrait another challenge for Plex residents. Some critics discuss the inappropriate internal arrangement of the space and the way format of the traditional layout used in the design of Plex buildings. Most of these complaints indicated a particular aversion to the small sizes of rooms and the narrow long corridors without a window.

Despite their historic character and environmental features, most old Plex buildings are not being used to their full potential. The spatial arrangement and the materials of Plex buildings are commonly not functional for the new generation of residents oftentimes with different life-styles than those who inhabited them decades ago. Therefore, these old buildings are strong candidates for renovation and rehabilitation, during which, oftentimes, their historic character and fabric is also erased. However, as a result of the deficiency of institutional supervision or specific rules of some of these renovation processes, the symbolic and cultural attributes of the building have often been overlooked. Plaster moldings disappear, doors are changed. Walls come down, brick facades and porches are altered.

The intensity of residents emotional ties to the Plex environment is measured with Shamai (1991) scale. Our findings confirm that after three years of residency in the Plex environment, young adult dwellers develop a certain enhanced degree of a sense of place. This group of residents frequently mentioned a great sense of belonging to the Plex environment which is not only limited to the Plex buildings' characteristics but also to the whole neighbourhood context. Those groups of young adult residents who have been living in the Plex environment for 5 years most often refer to the patterns of attachment toward their environment.

English speaking young adults who were born and raised in Verdun used Verdunites to identify themselves as a distinctive community. This group predominantly express degrees of commitment to it. We could not always make a sharp distinction between different phases of generated sense of place. Indeed, all of these phases are subconsciously acquired through everyday experiences of residents that are repeated over the span of time. These experiences have a significant role in breeding a particular sense of place and patterns of enhanced attachment for young adult residents.

Young adult residents most often identify the 'personality' of 'Plexdom' with its particular inherent social network more than to a direct relationship with its spatial spaces. In fact, when they review the experience of life in the Plex environment, 'people' and 'neighbours' are part of the greatest noteworthy recurrent phrases in their descriptions. Noteworthy in this is that the dynamic social interaction of Plex neighbourhoods does not create a sense of social overloading for the residents. Our research shows that in the Plex neighbourhoods, attachment is noticeably intertwined with the social fabric of the environment.

The physical form and features of Plex buildings and the proximity of its communal spaces are the primary factors in framing neighbourly social relationships. As well, the high visibility of a personal-common mode of life that comes out of the close public-private spaces within the Plex building environment helps to develop deep and meaningful ties between the neighbours. The general analysis of our interviews indicates that young adults' experiences, impressions and attachments lead to the enhanced sense of community that unites the residents of their buildings. However, social interaction on the scale of the neighbourhood did not seem to demonstrably enhance the level of place attachment. Still, the extension of casual contacts within the block facilitates a greater sense of familiarity with the environment which, over the years promotes a greater and more significant social attachment to the Plex neighbourhoods.

Essentially, our research reveals that young adult residents are typically amenable to adapting their own personal and social behaviour to adjust to the Plex environment as it is. One may argue that this adaptation is predictably a temporary acceptance of the residential environment. By this assumption, young adult residents must have to express a strong aspiration to move out of Plex neighbourhoods at a convenient time. But our research discovers that not only would this group like to extend their habitation in the Plex environment, but also they feel attached to at least part of it. The adaptation process of English-speaking young adults happens both within the spatial and social context of the Plex environment. The process of adaptation to the spatial features of Plex buildings is mainly adjusted because of the renovation process. Nevertheless, young adults are proven to be able to cope with an over-stimulation of noises, which exists in between the flats, with a minimum amount of conflict with their neighbours.

Interviewees mentioned that the police are rarely, if ever, called, and conflicts are either tolerated or resolved between neighbours, indicating a high level of sense of security.

This study finds more significant evidence with regards to the positive adaptation process of young adult residents towards accepting the social life of the Plex environment. English-speaking young adult residents seem to demonstrate a higher level of tolerance to social conflicts in a diverse residential Plex environment. They also show adjusted attitudinal patterns regarding their privacy-maintaining and territorial behaviours. Likewise, it seems as if it is the adaptation to the neighbours' diversity that promotes greater levels of tolerance towards neighbourly conflicts. Encouragingly, we found no evidence of linguistic or cultural conflicts between the minority of English-speaking young adult residents and other neighbours, amongst them the majority being Francophone residents.

Despite major social changes throughout the past eight decades, preliminarily statistical and field evidence confirm that as a residential built environment, Plex housing and neighbourhoods continue to be attractive to English-speaking young and middle aged adults (29-45) and their families. This study confirms the primary research hypotheses and the viability of this population's choice of Plex neighbourhoods as an attractive residential place.

Our results confirm that Montréal's traditional Plex neighbourhoods continue to offer affordable housing and flexible tenure structure sought by English-speaking young and middle aged adults and their families. These neighbourhoods tend to be fairly accessible to Montréal's downtown, where a wide range of commercial spots, professional possibilities, arts, cultural, and social opportunities flourish. Furthermore Verdun's Plex neighbourhood, offers reasonable accessibility to local shops, schools, community centers, parks, and play grounds, as well as easy access to downtown universities and cultural and entertainment zones. In addition to a low-cost housing type with convenient accessibility, this attractive urban landscape composed of unique architectural forms represents a safe, liveable environment which promotes alternate lifestyles. These are primary factors in the above mentioned population's decision-making process in choosing Verdun's traditional Plex neighbourhood.

Plex type housing with its specific physical, spatial and social characteristics can generate a strong 'sense of place' for the above mentioned population. The unique architecture of Plex buildings offers close spatial proximity to other residents through outdoor spaces such as balconies, porches, and front and rear outside staircases, constituting privileged social interactive spaces between residents. These both private and public architectural features of Plex buildings enhance the most immediate adjacent social spaces amongst neighbours and passer-bys, and is evidently conducive to the development of community ties within an active socializing environment.

Studying the ways English-speaking young and middle aged adult residents feel, and experience and interact with their Plex residential places confirms an outstanding level of residential satisfaction with this environment.

People in this population subgroup most often describe Plex neighbourhoods as open, friendly and flexible residential environments where they experience security, sociability, and livability in the surrounding physical and social environment. However, the Plex buildings are not the ultimate residential choice of some of them. In fact, certain architectural disadvantages, specifically with regards to the physiologically impaired people's, or elderlies' needs are widely raised by critics about this type of housing or at least their upstairs flats. Yet, our findings confirm that despite having some personal, social or spatial discomforts in the Plex environment, this population subgroup's sentiment about Plex buildings remains mostly positive.

This study ascertains that old established Plex neighbourhoods offer a lifestyle of their own. Human behaviour in response to this lifestyle is mostly indicated in semi-private transitional zones where frequency of contacts and casual interactions (mostly with the next-door neighbours) regularly occurs. Although people may not always wish to engage socially with others, the physical and spatial proximity of Plex buildings, the unclear boundaries in socio-territorial zones, together with the neighbours' diversity demonstrate a higher level of tolerance and understanding of social conflicts, an adaptation of different privacy-maintaining and territorial standards, and the actual behaviour of the English-speaking young adult residents, both for the locals and the newcomers. All these features bundled together have been shown to produce a safe, secure, comfortable, humanly-connected residential context for its residents.

Limitations and recommendations for future research:

This study has reached its goal by answering all research questions and thoroughly examining the research hypotheses. Yet, there were some unavoidable limitations in the research process. First, this qualitative study was conducted on thirty-five interviewees, which may not represent Verdun's English-speaking young and middle aged Plex residents. Second, the eastern part of Verdun is one of the many old established neighbourhoods of Montréal, that are heavily composed of Plex buildings. Therefore, to extrapolate results to larger groups, and to other Plex neighbourhoods of Montréal, the study should have involved more participants in different neighbourhoods. Furthermore, although, the interview questionnaires were carefully prepared, we are still aware of their potential limitations and possible shortcomings. The scarcity of academic research about architectural, social and urban planning values of Plex housing and its related urban milieu, required us to focus our investigation on a different dimension of the Plex environment. Still, we acknowledge that this study may not provide exhaustive understanding of the Plex way of building and the experiences of living in superposed flats. While this thesis has demonstrated the influence of superposed flats architecture on sense of place and place attachment of residents, many opportunities for extending the scope of this thesis remain. There is undoubtedly the need for further studies to explore the different dimensions of the Plex type of housing and its surrounding environment.

The present study did not inspect the historic and heritage value of the Plex environment. However, it is essential to mention the importance of preserving these unique old buildings as an insightful acknowledgement to the architectural history of Montréal's heritage. This reality brings to light the importance of locating and saving the best of the Plex buildings. Indeed, the preservation of these historic buildings is

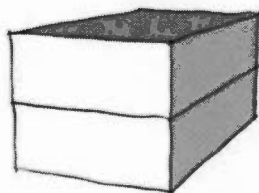
positive for residents and neighbourhoods. Once they are gone there is no chance to restore these historic sites; when a piece of history is destroyed, it is lost forever.

Although critics discuss mostly the architecture of the Plex buildings, the particular neighbourhoods' environment and the Plex' social life are valuable dimensions to consider in future studies. Plex neighbourhoods were historically cohesive units in which residents' requirements typically had to be satisfied within the neighbourhood's boundaries. The inhabitants had a sort of commitment to the local communities and there was a high degree of socialization patterns and sense of community amongst the residents. But, the shift to industrial cities, and the increased usages and reliance on the media and virtual social connections changed the way that people are living and socializing. In some residential localities people are no longer able to become acquainted with other residents because of the physical barriers imposed by their urban design. Consequently, the social ties and the form of everyday interactions are not generating a sense of community and togetherness among neighbours.

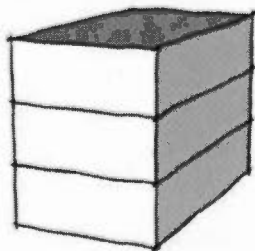
This study suggests the importance of future research to investigate the social fabric of old established Plex neighbourhoods. Understanding the social life of Plex neighbourhoods on the scale of micro-settings, street blocks, and walking friendly neighbourhoods can provide functional models for future housing designs and enhanced urban residential environments. Much research also remains to be done on topics related to the particular lifestyle of plex neighbourhoods and human response to this specific lifestyle.

APPENDIX A

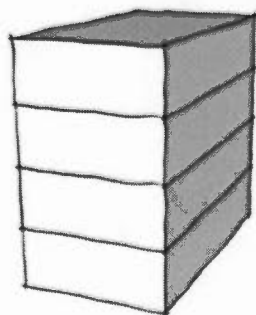
**MONTREAL'S RESIDENTIAL TYPOLOGIES: THE PLEX FAMILY OF
SUPERPOSED FLATS, AS PER THE DAVID HANNA CLASSIFICATION
SYSTEM**

A-THE BASIC TYPOLOGY**DUPLEX**

A TWO-STOREY STRUCTURE
CONTAINING TWO SUPERPOSED FLATS
FULL WIDTH AND FULL DEPTH WITH INSIDE OR OUTSIDE
STAIRCASES
INTRODUCED IN THE EIGHTEENTH CENTURY

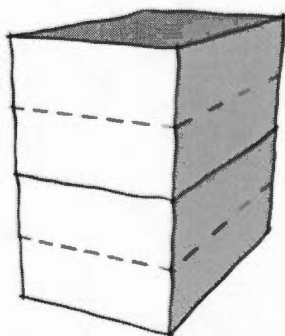
**TRIPLEX**

A THREE-STOREY STRUCTURE
CONTAINING THREE SUPERPOSED FLATS
FULL WIDTH AND FULL DEPTH WITH INSIDE ONLY OR
INSIDE/OUTSIDE STAIRCASES
SOMETIMES WITH SEMI-BASEMENT LOWER FLAT
INTRODUCED IN THE 1860s

**QUADRUPLEX**

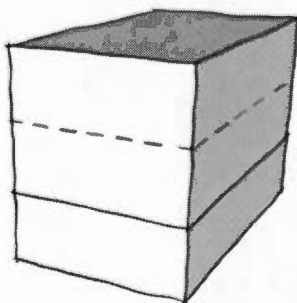
A VERY RARE TYPE
A FOUR-STOREY STRUCTURE
CONTAINING FOUR SUPERPOSED FLATS
FULL WIDTH AND FULL DEPTH WITH INSIDE AND
OUTSIDE STAIRCASES
INTRODUCED IN THE 1890s

B-THE DUPLEX DERIVATIVES



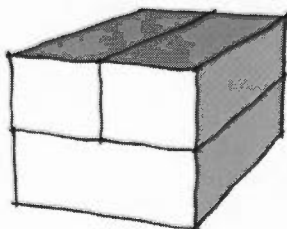
DUPLEX WITH TWO MAISONNETTES

A FOUR-STOREY STRUCTURE
CONTAINING TWO SUPERPOSED FLATS
FULL WIDTH, FULL DEPTH, TWO-STOREYS EACH WITH
INSIDE STAIRCASES FROM RAISED FRONT DOORS
LOWER FLAT INCLUDES A RAISED BASEMENT OR A
SEMI-BASEMENT
INTRODUCED IN THE 1860s



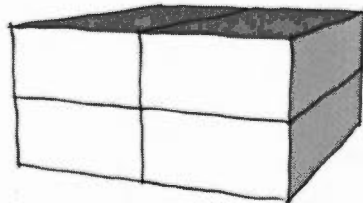
DUPLEX WITH ONE MAISONNETTE

A THREE-STOREY STRUCTURE
CONTAINING TWO SUPERPOSED FLATS
FULL WIDTH, FULL DEPTH, WITH TWO-STOREYS
UPPER FLAT WITH INSIDE STAIRCASES
INTRODUCED IN THE 1870s



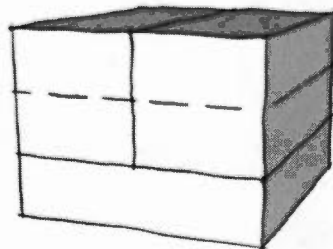
THREEPLEX

A TWO-STOREY STRUCTURE
CONTAINING THREE SUPERPOSED FLATS
FULL OR HALF WIDTH; FULL DEPTH WITH INSIDE OR
OUTSIDE STAIRCASES
INTRODUCED IN THE 1840s



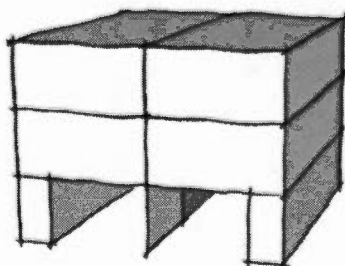
FOURPLEX OR SEMI-DETACHED DUPLEXES

A TWO-STOREY STRUCTURE
CONTAINING FOUR SUPERPOSED FLATS
FULL WIDTH TO SHARED WALL; FULL DEPTH WITH
INSIDE OR OUTSIDE STAIRCASES
INTRODUCED IN THE 1850s



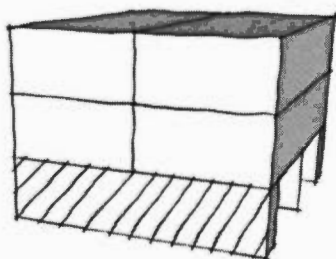
THREEPLEX WITH TWO MAISONNETTES

A THREE-STOREY STRUCTURE
CONTAINING THREE SUPERPOSED FLATS
FULL AND HALF WIDTH; FULL DEPTH WITH TWO-
STOREY UPPER FLATS WITH INSIDE STAIRCASES
INTRODUCED IN THE 1870s



FOURPLEX OR SEMI-DETACHED DUPLEXES WITH GARAGES

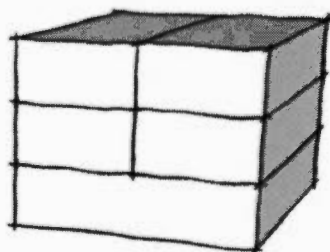
A TWO-STOREY STRUCTURE
CONTAINING TWO OR FOUR SUPERPOSED FLATS
FULL WIDTH TO SHARED WALL; FULL DEPTH WITH INSIDE
STAIRCASES; WITH BASEMENT GARAGE AT FRONT
INTRODUCED IN THE 1930s



FOURPLEX OR SEMI-DETACHED DUPLEXES WITH GARAGES

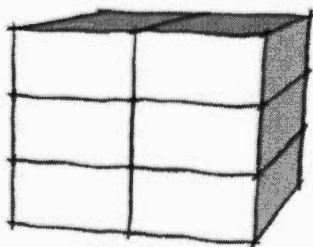
A TWO-STOREY STRUCTURE
CONTAINING TWO OR FOUR SUPERPOSED FLATS
FULL WIDTH TO SHARED WALL; FULL DEPTH WITH INSIDE
STAIRCASES; WITH BASEMENT GARAGE AT SIDE OR REAR
INTRODUCED IN THE 1930s

C-THE TRIPLEX DERIVATIVES



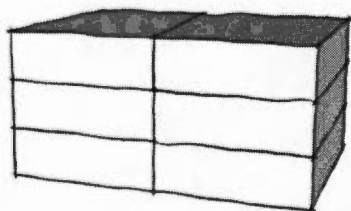
FIVEPLEX

A THREE-STOREY STRUCTURE
CONTAINING FIVE SUPERPOSED FLATS
FULL OR HALF WIDTH; FULL DEPTH WITH INSIDE AND
OUTSIDE STAIRCASES
INTRODUCED IN THE 1920s



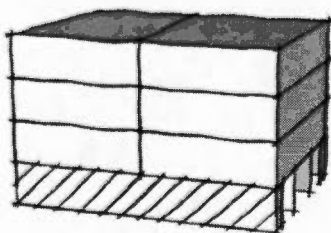
SIXPLEX

A THREE-STOREY STRUCTURE
CONTAINING SIX SUPERPOSED FLATS
HALF WIDTH AND FULL DEPTH WITH INSIDE ONLY OR
INSIDE/OUTSIDE STAIRCASES
INTRODUCED IN THE 1870s



SIXPLEX OR SEMI-DETACHED TRIPLEXES

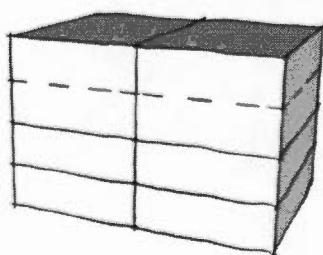
A THREE-STOREY STRUCTURE
CONTAINING SIX SUPERPOSED FLATS
FULL WIDTH TO SHARED WALL, FULL DEPTH
INTRODUCED IN THE 1960s



SIXPLEX OR SEMI-DETACHED TRIPLEXES

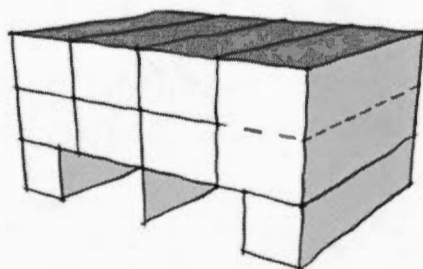
A THREE-STOREY STRUCTURE
CONTAINING SIX SUPERPOSED FLATS
FULL WIDTH TO SHARED WALL, FULL DEPTH WITH
BASEMENT GARAGES ON SIDE
INTRODUCED IN THE 1960s

C-THE TRIPLEX DERIVATIVE (CONTINUED)



SIXPLEX WITH TWO MAISONNETTES

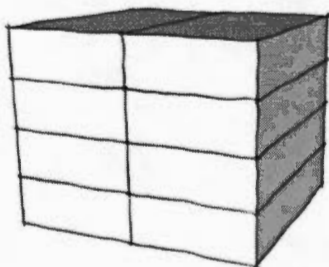
A THREE-AND-A-HALF OR FOUR-STOREY STRUCTURE
CONTAINING SIX SUPERPOSED FLATS
FULL WIDTH TO SHARED WALL, FULL DEPTH WITH
STOREY-AND-A-HALF OR TWO-STOREY UPPER FLATS
INTRODUCED IN THE 1960s



MULTIPLY WITH A MAISONETTE

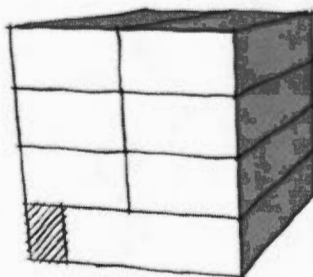
A TWO-STOREY STRUCTURE
CONTAINING SIX FLATS, ONE TWO-STOREY
MAISONETTE AND TWO BASEMENT FLATS OR OTHER
COMBINATIONS
HALF WIDTH, FULL DEPTH WITH BASEMENT GARAGES
INTRODUCED IN THE 1970s

D-THE QUADRUPLY DERIVATIVE



EIGHTPLEX WALK-UP

A THREE-STOREY STRUCTURE
CONTAINING EIGHT SUPERPOSED FLATS, HALF WIDTH,
FULL DEPTH WITH TWO BASEMENT FLATS WITH
INSIDE CENTRAL STAIRCASE
INTRODUCED IN THE 1970s

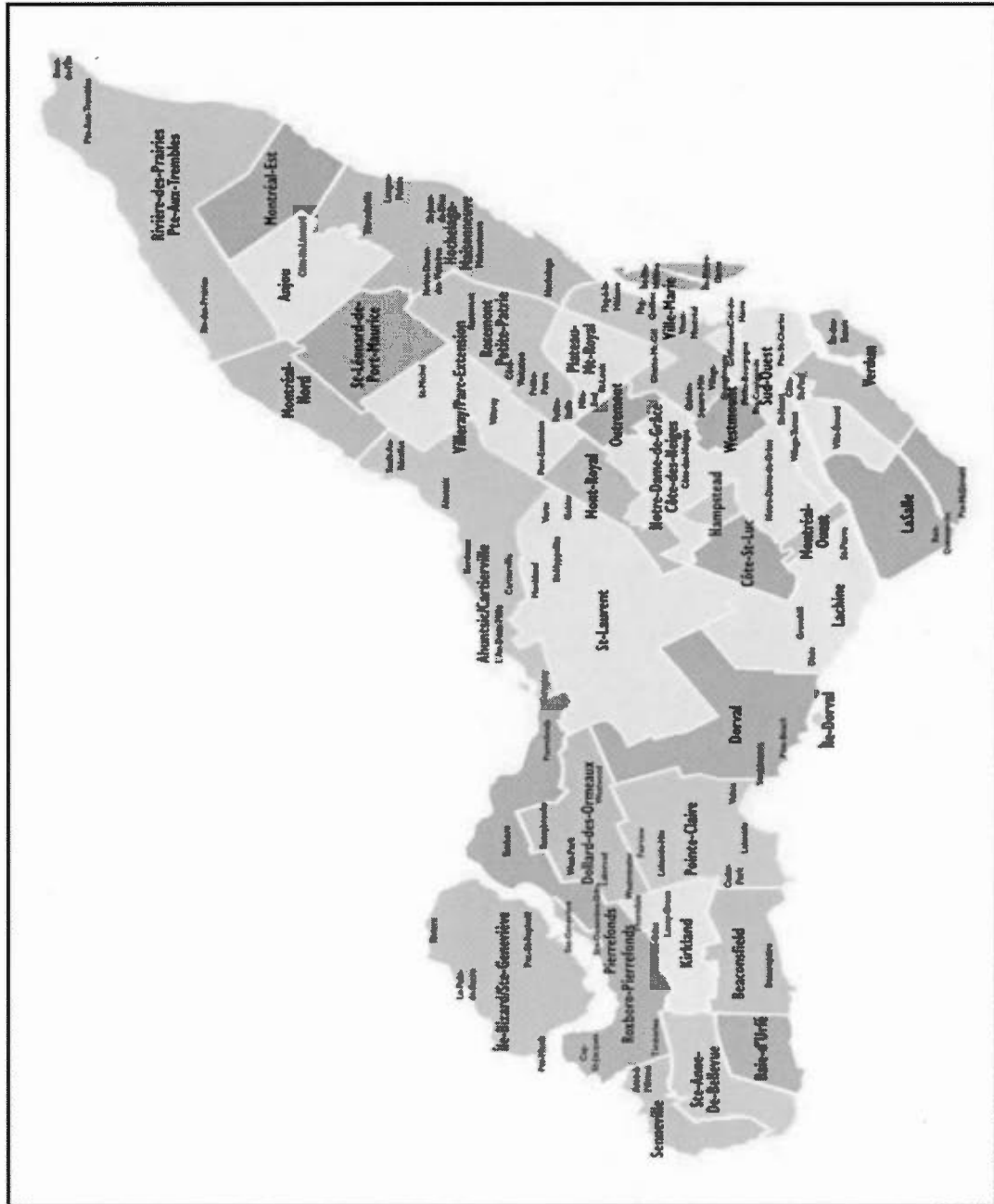


SEVENPLEX WALK-UP

A FOUR-STOREY STRUCTURE
CONTAINING SEVEN SUPERPOSED FLATS, HALF
WIDTH, FULL DEPTH WITH A WIDER BASEMENT FLAT
AND FURNACE ROOM
WITH INSIDE CENTRAL STAIRCASE
INTRODUCED IN THE 2000s

APPENDIX B

**MONTRÉAL ISLAND BOROUGHS AND MUNICIPALITIES, VILLE DE
MONTRÉAL (2015), MUNICIPAL ORGANIZATION, TERRITORY**



APPENDIX C

PLEX BUILDINGS IN EASTERN VERDUN

Zone	Type	Total Number of Dwellings	Apartment Duplex ¹⁵⁵		Apartment Buildings that Have Fewer than Five Storeys ¹⁵⁶		Total Plex Dwellings (%)
			Number	(%)	Number	(%)	
300		1270	75	5,91	1080	85,04	90,95
301		2620	185	7,06	2285	87,21	94,27
302		1480	210	14,19	1220	82,43	96,62
303		1190	145	12,18	920	77,31	89,49
304		1575	180	11,43	935	59,37	70,8
305		2005	260	12,97	1290	64,34	77,31
306		1445	185	12,8	940	65,05	77,85
307		1610	190	11,8	1370	85,09	96,89
308		1225	185	15,1	920	75,1	90,2
309		600	80	13,33	390	65	78,33
310		1620	1180	72,84	230	14,2	87,04
311		2000	660	33	1125	56,25	89,25
312		1630	1020	62,58	390	23,93	86,51
313		1545	1290	83,5	205	13,27	96,77
314		1185	1140	96,2	15	1,27	97,47
085		370	60	16,22	275	74,32	90,54

¹⁵⁵ Statistic Canada, 2006- Catalogue no. 95-563-XPB

It includes detached duplexes, semi-detached duplexes (pair) or row duplexes. In 2006, 'apartment or flat in a duplex' replaced 'apartment or flat in a detached duplex' and includes duplexes attached to other dwellings or buildings. This is a change from the 2001 Census where duplexes attached to other dwellings or buildings were classified as an 'apartment in a building that has fewer than five storeys', following us to isolate all duplexes for the first time.

¹⁵⁶ It includes row triplexes, five Plexes and six Plexes. It also may refer to three and four story apartment blocks or three and four story condos. Field work has shown that these apartments or condos are indeed rare in this part of Verdun, so we may assure that the category refers mainly to Plexes.

APPENDIX D

PLEX NEIGHBOURHOODS' POPULATION BETWEEN 29 AND 45 AGE
BRACKET IN EASTERN VERDUN¹⁵⁷

Age & Gender Zone	Total Population (2006)	Total Number of Young Adults (aged 29 to 45 years old)	Young Adults as a % of Total Population
300	2706,00	690	25,5
301	4963,00	1375	27,71
302	2827,00	830	29,36
303	2213,00	600	27,11
304	2911,00	700	24,05
305	3709,00	930	25,07
306	2799,00	680	24,29
307	3269,00	845	25,85
308	2522,00	630	24,98
309	1305,00	320	24,52
310	3420,00	830	24,27
311	3986,00	855	21,45
312	3220,00	705	21,89
313	3290,00	725	22,04
314	2422,00	495	20,44
085	825,00	190	23,03

¹⁵⁷ Statistic Canada, 2006, Catalogue no. 95-565-XPB

The Census population, represents the number of Canadians whose usual place of residence is in that area, regardless of where they happened to be on Census Day, as well as those considered to be 'non-permanent residents'.

APPENDIX E

PLEX BUILDINGS BY PERIOD OF CONSTRUCTION IN EASTERN
VERDUN¹⁵⁸

Zone \ Period	Before 1946	1946- 1960	1961- 2006	Traditional Plex Buildings (Before 1946, 1946- 1960) (%)	Total Number of Buildings
300	435	285	530	57.60	1250
301	970	430	1140	55.11	2540
302	830	265	395	73	1500
303	410	210	525	53.91	1150
304	380	455	740	52.84	1580
305	980	290	815	60.91	3085
306	820	340	425	73.41	1580
307	975	430	235	86.19	1630
308	825	335	175	84.67	1370
309	215	275	115	81.66	600
310	560	830	240	85	1635
311	1190	535	320	81	1640
312	885	445	320	81	1640
313	530	795	190	86.88	1525
314	235	830	320	88.75	1200
085	130	40	180	47.88	355

¹⁵⁸ Statistic Canada, 2006 – Catalogue no. 95-563-XPB

APPENDIX F

ENGLISH AS A LANGUAGE MOST OFTEN, PLEX NEIGHBOURHOODS OF
EASTERN VERDUN¹⁵⁹

English Zone	Total Number of Responses to the Official Language Spoken Most Often	English	English & French	English and Non- Official Language	(%) of Total Population Who Speaks English Most Often
300	2555	610	195	690	23,87
301	4955	1120	370	1285	22,6
302	2830	605	120	640	21,38
303	2205	455	115	495	20,63
304	2900	690	165	755	23,79
305	3690	850	240	940	23,04
306	2795	645	145	680	23,08
307	3270	875	185	930	26,76
308	2520	590	85	610	23,41
309	1305	305	55	315	23,37
310	3410	935	85	955	27,42
311	3765	1055	120	1090	28,02
312	3200	735	65	745	22,97
313	3285	1110	75	1115	33,79
314	2410	850	70	855	35,27
085	805	165	55	175	20,5

¹⁵⁹ Statistic Canada, 2006- Catalogue no. 95-563-XPB

APPENDIX G

PLACE OF RESIDENCE 5 YEARS AGO (MOBILITY) IN PLEX
NEIGHBOURHOODS OF VERDUN¹⁶⁰

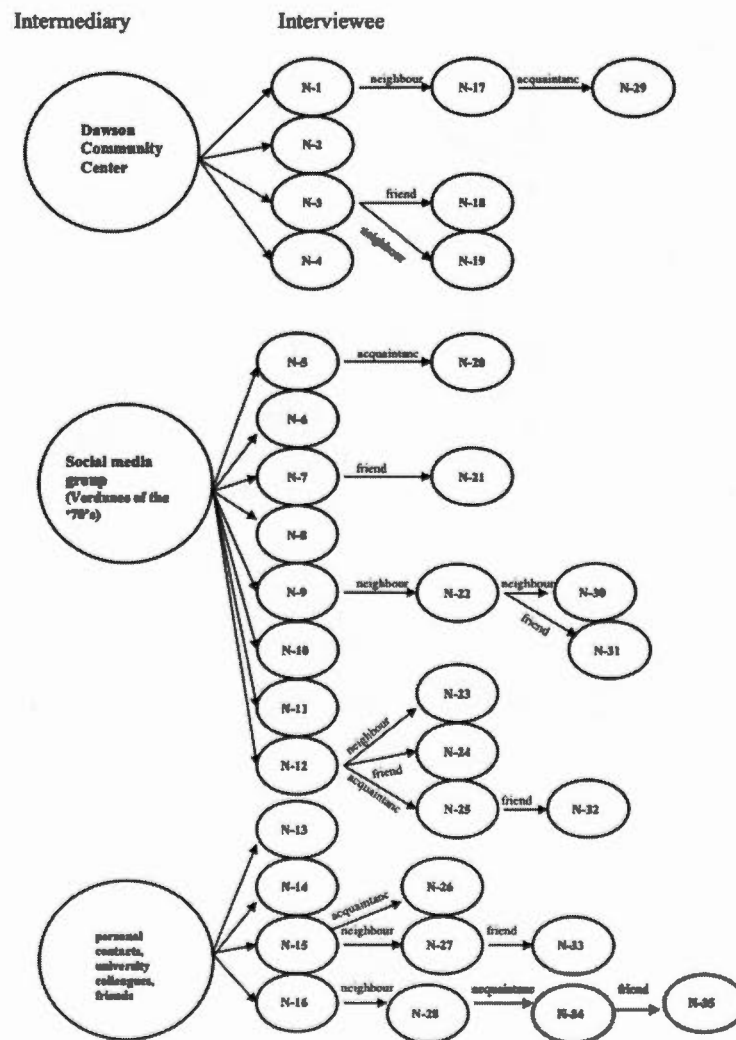
Mobility Zone	Total Population 5 Years and Over	Non- Movers	Movers	Non- Movers (%)
300	2315	740	1575	31.96
4735	4735	2055	2680	43.40
302	2845	1105	1740	38.84
303	2140	820	1320	38.31
304	2710	1305	1400	48.15
305	3745	1885	1855	50.33
306	3055	1515	1540	49.59
307	3205	1170	2040	36.50
308	2655	1180	1475	44.44
309	1240	735	500	59.27
310	3300	2065	1235	62.57
311	3805	1885	1920	58.91
312	3140	1850	1290	58.91
313	3085	1785	1300	57.86
314	2440	1570	875	64.34
085	765	395	370	51.63

¹⁶⁰ Statistic Canada, 2006 – Catalogue no. 95-563-XPB

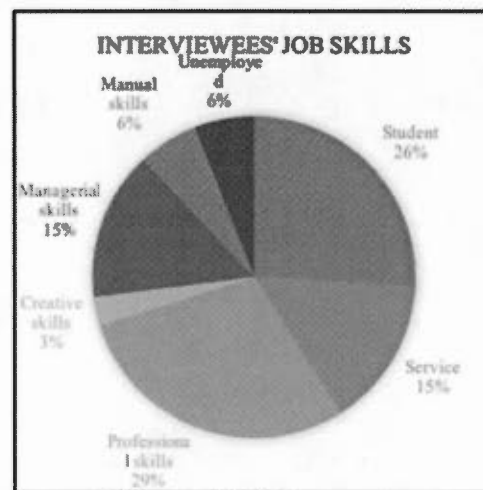
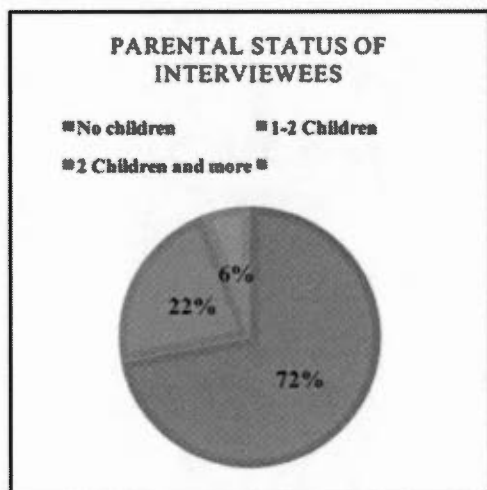
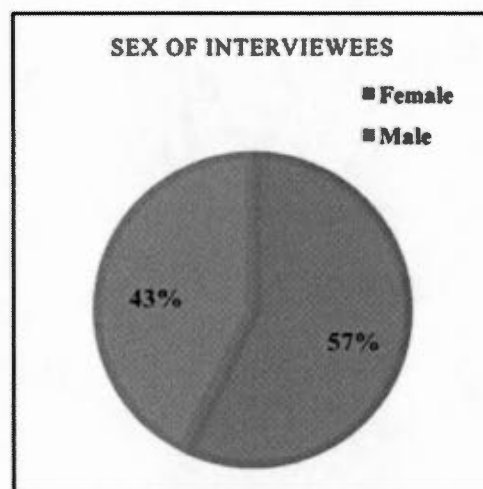
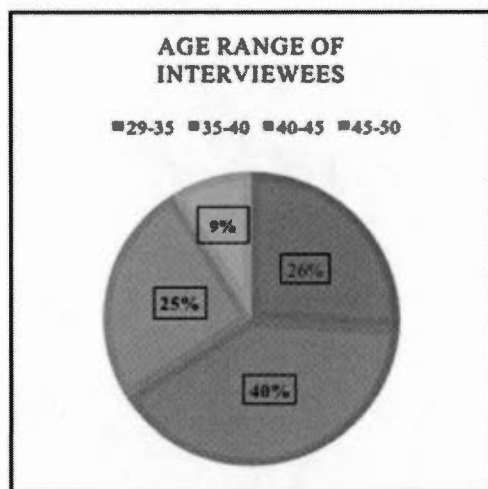
Mobility refers to the relationship between a person's usual place of residence on Census Day and individual's usual place of residence five years earlier.

APPENDIX H

INTERVIEW RECRUITMENT DIAGRAM

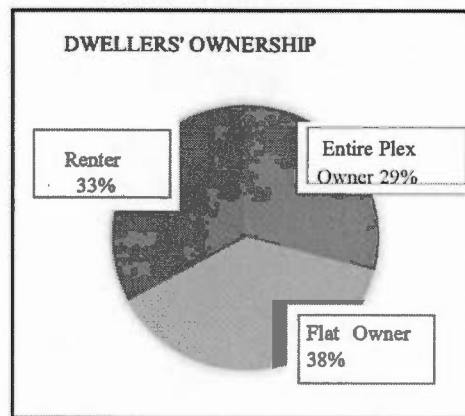
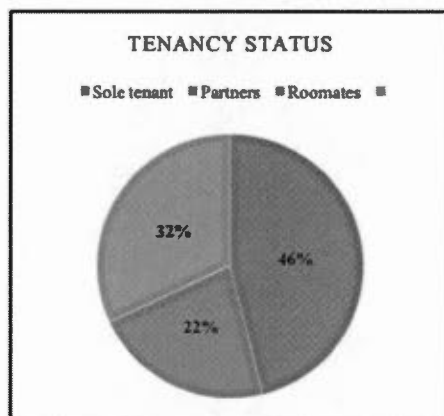
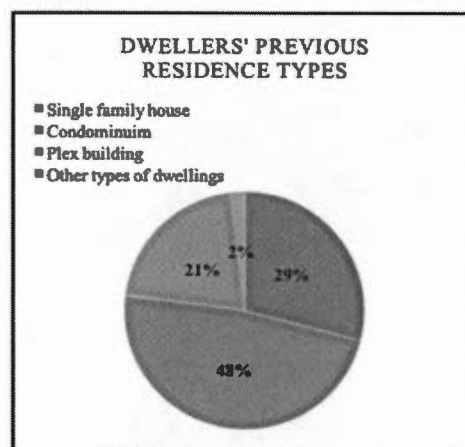
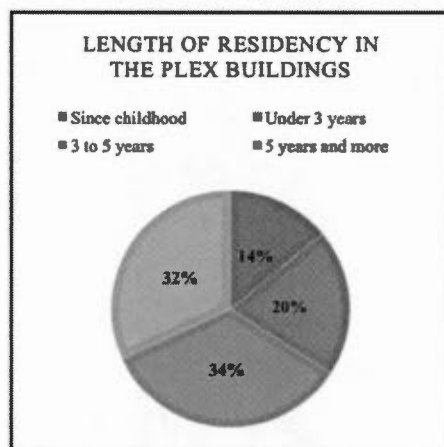


APPENDIX I

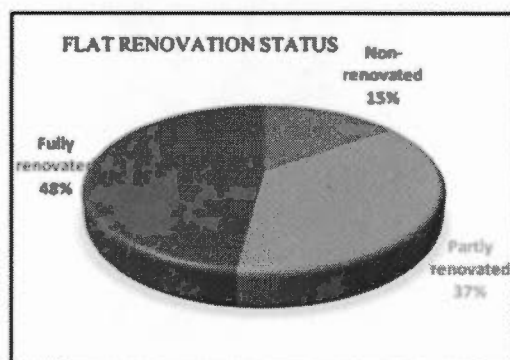
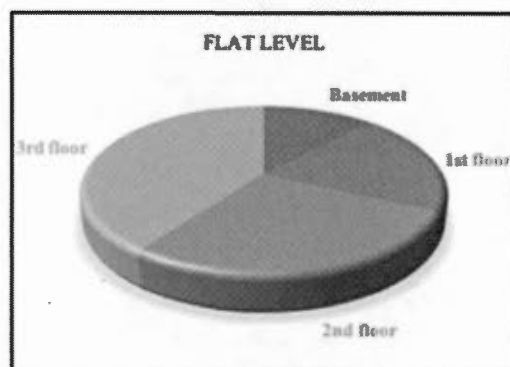
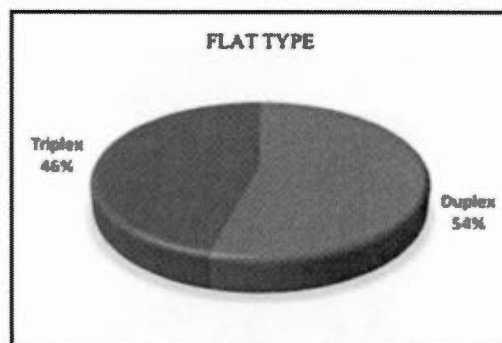
SOCIO-DEMOGRAPHIC CHARACTERISTICS OF INTERVIEWEES IN THE PLEX
NEIGHBOURHOODS OF EASTERN VERDUN

APPENDIX K

DWELLING BACKGROUND AND HOUSING STATUS OF INTERVIEWEES
IN THE PLEX NEIGHBOURHOODS OF EASTERN VERDUN



APPENDIX K

DWELLING BACKGROUND AND HOUSING STATUS OF INTERVIEWEES
(CONTINUED)

APPENDIX M

DETAILED SOCIO-DEMOGRAPHIC INFORMATION OF INTERVIEWEES

No.	Sex	Age	Parental status	Occupation	Household type	Years in Verdun	Flat type	Renovation status
N-1	F	32	No-children	Creative skills	Sole tenant	3	Duplex	Non-renovated
N-2	F	30	No-children	Student	Roommates	6	Duplex	Fully-renovated
N-3	F	42	No-children	Professional skills	Partners	7	Duplex	Fully-renovated
N-4	M	40	No-children	Service	Sole tenant	Since birth	Triplex	Partly-renovated
N-5	F	41	1 child	Unemployed	Partners	8	Triplex	Partly-renovated
N-6	M	38	No-children	Professional skills	Sole tenant	3	Triplex	Fully-renovated
N-7	M	36	No-children	Student	Roommates	2	Triplex	Fully-renovated
N-8	F	37	No-children	Student	Sole tenant	6	Triplex	Partly-renovated
N-9	F	34	No-children	Student	Roommates	5	Duplex	Partly-renovated
N-10	M	35	No-children	Managerial skills	Sole tenant	8	Duplex	Fully-renovated
N-11	F	46	1 child	Professional skills	Partners	Since birth	Duplex	Fully-renovated
N-12	F	42	No-children	Unemployed	Roommates	3	Duplex	Partly-renovated
N-13	M	38	No-children	Service	Sole tenant	4	Duplex	Partly-renovated

N-14	F	37	No-children	Professional skills	Sole tenant	3	Duplex	Fully-renovated
N-15	M	34	No-children	Student	Sole tenant	5	Duplex	Fully-renovated
N-16	F	35	No-children	Student	Partners	9	Duplex	Fully-renovated
N-17	M	31	No-children	Student	Roommates	3	Triplex	Non-renovated
N-18	M	33	1 child	Student	Partners	7	Duplex	Fully-renovated
N-19	F	32	No-children	Student	Roommates	3	Duplex	Partly-renovated
N-20	F	39	No-children	Professional skills	Sole tenant	8	Triplex	Partly-renovated
N-21	F	36	No-children	Service	Sole tenant	9	Triplex	Partly-renovated
N-22	M	39	No-children	Manual skills	Sole tenant	3	Duplex	Fully-renovated
N-23	M	40	No-children	Professional skills	Sole tenant	4	Duplex	Fully-renovated
N-24	F	38	1 child	Managerial skills	Partners	Since birth	Duplex	Fully-renovated
N-25	M	44	No-children	Unemployed	Sole tenant	3	Triplex	Partly-renovated
N-26	F	43	1 child	Professional skills	Roommates	6	Triplex	Partly-renovated
N-27	M	42	No-children	Service	Sole tenant	5	Duplex	Non-renovated
N-28	F	40	2 children	Managerial skills	Roommates	5	Triplex	Non-renovated
N-29	M	41	1 child	Professional skills	Partners	9	Duplex	Partly-renovated
N-30	F	37	1 child	Managerial skills	Roommates	7	Triplex	Fully-renovated
N-31	M	47	1 child	Manual skills	Roommates	Since birth	Triplex	Fully-renovated
N-32	F	41	No-children	Service	Partners	5	Duplex	Non-renovated
N-33	F	42	No-children	Managerial skills	Sole tenant	4	Triplex	Partly-renovated

N-34	F	37	No-children	Professional skills	Sole tenant	5	Triplex	Fully-renovated
N-35	M	46	2 children	Professional skills	Roommates	Since birth	Triplex	Fully-renovated

APPENDIX N

INTERVIEW GUIDE

1. How old are you?
2. Who lives here besides you? Do you have any children? Any pets? car?
3. What kind of work do you do?
4. Is this the area that you grew up in when you were living with your parents?
5. Can you tell me where you were living before moving into this present neighbourhood?
6. How long have you been living in this neighbourhood?
7. Why did you choose to come and live here?
8. Did you know anybody living here before you moved here?
9. So, how did you find here then?
10. How many people in the neighbourhood do you estimate that you now know, enough to say hello to?
11. Before you moved into this neighbourhood had you formed an impression of it based on what you had read or heard? What was that impression?
12. And now, after living here for a while, what do you think about it?
13. What is a Plex for you? What is significant about it?
14. What are your expectations of a good neighbourhood?
15. Do you find that your expectations satisfied in Verdun?
16. What are the negative aspects of this neighbourhood?
17. Do you plan to move in immediate future? If yes, would you consider staying in the neighbourhood or Verdun?
18. Do you feel personally feel safe for yourself and your family in this neighbourhood? Why?
19. Do you live in a Duplex, Triplex or other _____?
20. Which flat are you in?
21. Which floor do you think is the best? Why?
22. Do you find the arrangement of the rooms in your flat suitable for your needs?
23. Can you hear your neighbours in adjacent apartments or upstairs or downstairs from you? To what degree does it disturb or bother you?
24. Have there ever been personal complaints exchanged between you and your neighbours? Were the Police ever called because of complaints?
25. Do you have access to a backyard?
26. Which parts of the building or property do you share with your neighbours (i.e. backyard, basement, garage, parking space etc.)?

27. Tell me about your life in the winter and what kind of problems you faced that you did not have in your previous place?
28. Do you know all of your immediate neighbours? (Those who live above/below you and in dwellings directly on either side of you).
29. In which way do they seem to be different from previous neighbors?
30. How often do you meet your neighbors?
31. Where do you mostly meet or talk with your neighbors?
32. Where do they live in relation to you to you – upstairs, downstairs or beside?
33. What do you think about casual social contacts or and other social network you have here? Do you find it be to be problematic sometimes?
34. Do you have any family or friends who live in the vicinity of you?
35. To what extent do you think that you could count on your immediate neighbors if something happened to you?
36. What do you like the most about your apartment?
37. What do you dislike the most about your apartment?
38. What was your first impression, when you first visited this apartment and neighborhood?
39. Do you have a balcony(s)? Which one do you use the most? How often do you use your balcony? What do you mostly do there?
40. Do you use your porch?
41. Do you have outside stairs?
42. How much do you feel that you can maintain your privacy in your apartment and neighborhood?
43. Tell me the first word which comes to your mind when you hear:

Balcony	
Duplex	
Triplex	
Stairs	
Porch	
Backyard	
Neighbor	

44. If the city decided to replace this type of dwelling with something else, what types of options would you be in favor of?
45. Imagine that you could talk to this flat, what would you like to say and hear?

APPENDIX P

INFORMATION LEAFLET


**UQAM | Université du Québec
à Montréal**

My name is Poupak PARVARESH. I am a PhD student in Urban studies at Université du Québec à Montréal (UQAM).

I am doing a research project on residents' experience of living in Duplex and Triplex buildings and neighbourhoods in Verdun.

I am interested to talk with young adults (between 29 to 45 years old) who have been living in Duplex or Triplex flats of Verdun for 3 years or longer, to learn about their perceptions, expectations and experiences.

I would like to kindly request you to help me by putting me in contact with any of your families, friends or associations who may accept to give me an hour of their precious time. During that time, we will discuss topics such as neighbourhood social life, the architecture of the duplex and triplex buildings, and their feelings about living in the neighbourhood.

If you would like further information or would like to meet me to do a personal interview, please feel free to contact me by phone at: 514-553-7979 or by email at the following address:

Parvaresh.poupak@courrier.uqam.ca

Many thanks in advance for helping me with my project.

École des sciences de la gestion
Département d'études urbaines et touristiques
Université du Québec à Montréal
315, rue Sainte-Catherine Est, local R-4950
Montréal, Qc
H2X 3X2

APPENDIX O

CONSENT FORM

“MONTREAL'S SUPERPOSED FLATS NEIGHBOURHOODS: THE INFLUENCE OF ARCHITECTURE ON ATTACHMENT AND SENSE OF PLACE AMONG ENGLISH-SPEAKING RESIDENTS AGED 29 TO 45 YEARS, A CASE STUDY OF VERDUN BOROUGH”

I have understood the nature of the research project described in the presentation letter. I would like to participate in this university study aimed at understanding the point of view of Duplex and Triplex buildings inhabitants of the neighbourhood life.

I have been informed, both orally and in writing, of the objectives of the research, the methods of data gathering and the terms of my participation in the project. I accept that this interview will be recorded to permit exact transcription of my views. I am aware that I can request that the recording be stopped at any moment. I am free to indicate to the interviewer any questions that make me uncomfortable and which I would prefer not to respond.

I have also been informed of my right to communicate with the supervisor of the project (Mr David HANNA, Tel. 514 987 4121), if I have any other questions.

I have also been informed that all information gathered during the interview will be treated in a confidential and anonymous fashion.

By signing this consent form, I accept to participate in this research project according to the terms described in the project presentation letter. I have signed two copies of this consent form, one of which I will keep.

Signature

Initial(s)

Date

Principal Researcher: Poupak PARVARESH

Tel. 514 5537979

Email Address: Parvaresh.poupak@courrier.uqam.ca

Under the direction of Professor: David HANNA

Tel. 514 987 4121

Email address: geourbs@gmail.com

Co-director: Professor Benoit DUGUAY

Tel. 514) 987-3000 poste 8171

Email address: duguay.benoit@uqam.ca

BIBLIOGRAPHY

- Alexander, Christopher. (1980). *The timeless way of building*. New York: New York Oxford University Press.
- Alexander, Christopher, Ishikawa, Sara, & Silverstein, Murray. (1977). *A pattern language*: New York, NY: Ox.
- Altman, Irwin; Low, Setha (1992). *Place attachment*. New York: New York Plenum Press.
- Ascher, François. (2010). *Métapolis ou L'avenir des villes* ([Nouv. éd.].. ed.). Paris: Paris : Odile Jacob.
- Atkinson, Rowland. (2004a). The evidence on the impact of gentrification: new lessons for the urban renaissance? *European Journal of Housing Policy*, 4(1), 107-131.
- Barker, Roger Garlock. (1968). *Ecological psychology: Concepts and methods for studying the environment of human behavior*: Stanford University Press.
- Bazeley, Patricia. (2013). *Qualitative data analysis with NVivo* (2nd ed.. ed.). Los Angeles: Los Angeles : SAGE.
- Beaujot, Roderic, McQuillan, Kevin, & Ravanera, Zenaida. (2007). Population change in Canada to 2017 and beyond: the challenges of policy adaptation. *Horizons*, 9(4), 3-12.
- Beauregard, R. A. (1990). Trajectories of neighborhood change: the case of gentrification. *Environment and Planning A*, 22(7), 855-874. Retrieved from <http://www.envplan.com/abstract.cgi?id=a220855>
- Bessière, Jacinthe. (1998). Local development and heritage: traditional food and cuisine as tourist attractions in rural areas. *Sociologia ruralis*, 38(1), 21-34.

- Blokland, Talja. (2003). *Urban bonds: social relationships in an inner city neighbourhood*. Cambridge: UK: Polity Press.
- Bondi, Liz. (1991). Gender divisions and gentrification: a critique. *Transactions of the Institute of British Geographers*, 190-198.
- Brown, Lawrence A., & Moore, Eric G. (1970). The Intra-Urban Migration Process: A Perspective. *Geografiska Annaler. Series B, Human Geography*, 52(1), 1-13.
- Browni Saracino, J. (2013). *The Gentrification Debates: A Reader*. Routledge
- Burgess, Ernest W. (1925). *The growth of the city: an introduction to a research project*. The urban sociology reader: Routledge.
- Cadwallader, Martin. (1992). Linear Models of Residential Choice. *Area*, 24(3), 289-294.
- Canter, David V, & Craik, Kenneth H. (1981). Environmental psychology. *Journal of Environmental Psychology*, 1(1), 111.
- Carter, Jennifer, Dyer, Pam, & Sharma, Bishnu. (2007). Displaced voices: sense of place and place identity on the Sunshine Coast. *Social & Cultural Geography*, 8(5), 755-773.
- Casakin, Hernan P, & Kreidler, Shulamith. (2008). Place attachment as a function of meaning assignment. *Open Environmental Sciences*, 2, 80-87.
- Childress, Herb. (2004). Teenagers, Territory and the Appropriation of Space. *A Global Journal of Child Research*, 11(2), 195-205.
- Connerly, Charles E, & Marans, Robert W. (1985). Comparing two global measures of perceived neighborhood quality. *Social Indicators Research*, 17(1), 29-47.
- Coolen, Henny; Ozaki, Ritsuko (2004). *Culture, Lifestyle and the Meaning of a Dwelling*. Paper presented at the Adequate & Affordable Housing for All.
- Cox, Kevin R. (1972). *Man, location, and behavior an introduction to human geography*. New York: New York J. Wiley.
- Cross, Jennifer E. (2001). *What is sense of place*. Paper presented at the Archives of the Twelfth Headwaters Conference.

Cuba, Lee, & Hummon, David M. (1993). A Place to Call Home: Identification With Dwelling, Community, and Region. *Sociological Quarterly*, 34(1), 111-131.

Day, Ll. (2000). Choosing a house: The relationship between dwelling type, perception of privacy, and residential satisfaction. *Journal of Planning Education and Research*, 19 (3), 265-275.

De La Riva, R et al. (2000). *Plex housing: A renewed tradition*. Canada Mortgage and Housing Corporation.

DeWolf, Christopher. (2006). Getting To Know The Plexes. Retrieved from www.urbanphoto.net.

DeWolf, Christopher. (2007). They Work On So Many Levels. Retrieved from www.urbanphoto.net.

Fennario, David. (1979). Balconville. Montréal, Québec.

Foot, David K, & Stoffman, Daniel. (1996). *Boom bust and echo: how to profit from the coming demographic shift*. MacFarlane Walter & Ross Press.

Freeman, Lance. (2005). Displacement or succession? Residential mobility in gentrifying neighborhoods. *Urban Affairs Review*, 40(4), 463-491.

Gehl, Jan. (1987). *Life between buildings using public space*. New York: New York Van Nostrand Reinhold.

Gilliland, Jason A. (1998). Modeling Residential Mobility in Montréal, 1860–1900. *Historical Methods: A Journal of Quantitative and Interdisciplinary History*, 31(1), 27-42.

Gober, Patricia. (1992). Urban housing demography. *Progress in human geography*, 16(2), 171.

Goldstein, K. (1973). *The organism: a holistic approach to biology derived from pathological data in man*: Zone Books.

Hamnett, Chris. (1991). The Blind Men and the Elephant: The Explanation of Gentrification. *Transactions of the Institute of British Geographers*, 16(2), 173-189.

- Hanna, David. B. (1986). *Montréal, A City Built By Small Builders: 1867-1880*. PhD Dissertation. MC Gill Press: Montreal.
- Hanna, David. B. & Dufaux, François. (2002). *Montréal: A Rich Tradition in Medium Density Housing*. Canada Mortgage and Housing Corporation.
- Hauge, Åshild Lappegard. (2007). Identity and Place: A Critical Comparison of Three Identity Theories. *Architectural Science Review*, 50(1), 44-51.
- Hawley, Amos-Henry (1971). *Urban society: an ecological approach*: Ronald Press Co.
- Hay, Robert. (1998). Sense of Place in Development Context. *Journal of Environmental Psychology*, 18(1), 5-29.
- Hays, K. Michael. (1992). *Modernism and the posthumanist subject the architecture of Hannes Meyer and Ludwig Hilberseimer*. Version remaniée de la thèse (de doctorat de l'auteur: Massachusetts Institute of Technology): Cambridge. Mass.
- Hoyt, Homer. (1939). *The structure and growth of residential neighborhoods in American cities*. U. S. Federal Housing Administration Staff: Reprint Services.
- Hummon, David M. (1992). *Community attachment*. In Altman and S.M. Low (eds) *Place attachment*, New York: Plenum Press.
- Hurd, Richard Melancthon. (1924). *Principles of city land values* (4th ed.). New York: New York The record and guide.
- Jacobs, Jane. (1961). *The death and life of great American cities*. Vintage Books.
- Kaltenborn, Bjørn P. (1998). Effects of sense of place on responses to environmental impacts: A study among residents in Svalbard in the Norwegian high Arctic. *Applied Geography*, 18(2), 169-189.
- Karsten, Lia. (2007). Housing as a way of life: towards an understanding of middle-class families' preference for an urban residential location. *Housing Studies*, 22(1), 83-98.

- Kennedy, Leslie.W. (1975). *Adapting to new environments: residential mobility from the mover's point of view*: Centre for Urban and Community Studies and Dept. of Sociology, University of Toronto.
- Knez, Igor. (2005). Attachment and identity as related to a place and its perceived climate. *Journal of Environmental Psychology*, 25(2), 207-218.
- Kunstler, J.H. (1993). *The geography of nowhere: the rise and decline of America's man-made landscape*: Simon & Schuster.
- Kusenbach, Margarethe. (2008). A hierarchy of urban communities: Observations on the nested character of place. *City & Community*, 7(3), 225-249.
- Lang, Jon T. (1994). *Urban design the American experience*. New York: New York Van Nostrand Reinhold.
- Laterreur, Isabelle; Schwartz, Marlène; Laurin, Claude & Bronson, Susan. (2008). Montréal's Plateau Mont-Royal Borough: An innovative approach to conserving and enhancing an historic urban neighborhood. *City & Time*, 4(1).
- Lawson, Bryan. (2001). *The language of space*. Oxford; Boston: Architectural Press.
- Le Corbusier. (1948). *Concerning town planning*. New Haven: Conn: Yale University Press.
- Le Corbusier. (1986). *Towards a new architecture*. Courier Corporation.
- Lees, Loretta, Slater, Tom, & Wyly, Elvin K. (2010). *The gentrification reader*. Routledge London.
- Leighton, Alexander H. (1959). *My name is legion foundations for a theory of man in relation to culture*. New York: New York Basic Books.
- Ley, David. (1994). Gentrification and the politics of the new middle class. *Environment and Planning D*, 12, 53-53.
- Linteau, Paul-André. (2007). *The history of Montréal: The story of a great North American city*. Montréal: Baraka Books of Montréal.

- Low, Setha M. (2008). Fortification of residential neighbourhoods and the new emotions of home. *Housing, Theory and Society*, 25(1), 47-65.
- Lu, M. (1998a). Analyzing migration decision making: relationships between residential satisfaction, mobility intentions, and moving behavior. *Environment and Planning A*, 30(8), 1473-1495.
- Lupton, Ruth, & Kintrea, Keith. (2011). Can Community-Based Interventions on Aspirations Raise Young People's Attainment? *Social Policy and Society*, 10(03), 321-335.
- Lynch, Kevin. (1970). *The image of the city*. Cambridge, Mass: Cambridge, Mass. MIT Press.
- Macklin, Eleanor D. (1980). Nontraditional Family Forms: A Decade of Research. *Journal of Marriage and Family*, 42(4), 905-922.
- Mallett, Shelley. (2004). Understanding home: a critical review of the literature. *Sociological Review*, 52(1), 62-89.
- Marsan, Jean-Claude. (1990). *Montréal in evolution [historical analysis of the development of Montréal's architecture and urban environment]*. Montréal: McGill-Queen's University Press.
- Maslow, Abraham H. (1954). *Motivation and personality* (3th ed.). New York: Harper & Row.
- May, Joseph Austin. (1970). *Kant's concept of geography and its relation to recent geographical thought (Vol. 4): University of Toronto Press*.
- Mazanti, Birgitte. (2007). Choosing Residence, Community and Neighbours-Theorizing Families' Motives for Moving. *Geografiska Annaler: Series B, Human Geography*, 89(1), 53-68.
- Mazumdar, Sanjoy; Mazumdar, Shampa; Docuyanana, Faye & McLaughlin, Colette, Marie. (2000). Creating A Sense of Place: The Vietnamese-Americans and Little Saigon. *Journal of Environmental Psychology*, 20(4), 319-333.

- McCarthy, Dennis, & Saegert, Susan. (1978). Residential density, social overload, and social withdrawal. *An Interdisciplinary Journal*, 6 (3), 253-272.
- McCreanor, Tim; Penney; Liane, Jensen; Victoria, Witten, Karen; Kearns, Robin, & Barnes; Helen Moewaka. (2006). 'This is like my comfort zone': Senses of place and belonging within Oruāmo/Beachhaven, New Zealand. *New Zealand Geographer*, 62(3), 196-207.
- Namazi-Rad, Mohammad-Reza ; Perez, Pascal; Berryman, Matthew; Lamy, Francois. (2012). An experimental determination of perceived liveability in Sydney. ACSPRI Conferences, RC33 Eighth International Conference on Social Science Methodology. 1-13.
- Neuman, William Lawrence. (2005). *Social research methods: Quantitative and qualitative approaches* (Vol. 13): Allyn and Bacon: Boston.
- Needless, Jane. (2003). Balconville, by David Fennario. *Maisonneuve Magazine*. Retrieved from <http://100objects.qahn.org/content/balconville-playbill-and-program-centaur-theatre-1979>.
- Nyaupane, Gyan P & Timothy, Dallen. J.(2010). Heritage awareness and appreciation among community residents: Perspective from Arizona, USA, *International Journal of Heritage Studies*, 16(3), 225-239.
- O'Bannon, Gary. (2001). Managing our future: The generation X factor. *Public Personnel Management*, 30(1), 95-110.
- Omuta, Gideon. (1988). The quality of urban life and the perception of livability: A case study of neighbourhoods in Benin City, Nigeria. *An International and Interdisciplinary Journal for Quality of Life Measurement*, 20(4), 417-440.
- Park, Robert Ezra, & Burgess, Ernest Watson. (1925). *The City*. University of Chicago Press.
- Pascual de Sans, Àngels. (2004). Sense of place and migration histories Idiotype and idiotope, *Area*, 36 (4), 348-357.
- Patton, Michael Quinn. (2002). *Qualitative research & evaluation methods* (3rd ed.. ed.). Thousand Oaks, Calif.: Thousand Oaks, Calif. : Sage Publications.

- Pennartz, Paul JJ. (1989). Semiotic theory and environmental evaluation: a proposal for a new approach and a new method. *Symbolic Interaction*, 12(2), 231- 249.
- Poyatos, Fernando. (1988). *Cross-cultural perspectives in nonverbal communication*. Toronto: Toronto C. J. Hogrefe.
- Prezza, Miretta; Amici, Matilde; Roberti, Tiziana; & Tedeschi, Gloria. (2001). Sense of community referred to the whole town: Its relations with neighboring, loneliness, life satisfaction, and area of residence. *Journal of Community Psychology*, 29(1), 29-52.
- Probyn, Elspeth. (1996). *Outside belongings*. New York: New York Routledge.
- Proshansky, Harold M. (1978). The city and self-identity. *Environment and Behavior*, 10 (2), 147-169.
- Quigley, John M, & Weinberg, Daniel H. (1977). Intra-urban residential mobility: a review and synthesis. *International Regional Science Review*, 2(1), 41-66.
- Radice, Martha. (2000). *Feeling Comfortable?: The Urban Experience of Anglo-Montréalers*: Presses Université Laval.
- Relph, Edward Charles. (1976). *Place and placelessness*. Revision de la these (de doctorat de l'auteur-University of Toronto, 1973), London.
- Richards, L. (1999). Data alive! The thinking behind NVivo. *Qual. Health Res.*, 9(3), 412-428.
- Ritchie, Jane; Lewis, Jane; Nicholls, Carol McNaughton; & Ormston, Rachel. (2013). *Qualitative research practice: A guide for social science students and researchers*: Sage.
- Rose, Damaris. (1984). Rethinking gentrification: beyond the uneven development of Marxist urban theory. *Environment and Planning D: Society and Space*, 2(1), 47-74.
- Rose, Damaris. (2004). Discourses and experiences of social mix in gentrifying neighbourhoods: a Montréal case study. *Canadian Journal of Urban Research* , 13(2), 278.
- Rossi, Peter Henry. (1980). *Why families move* (2nd ed.). Beverly Hills, Calif: Beverly Hills, Calif. Sage.

- Salt, Bernard. (2004). *The big shift*. South Yarra: Hardie Grant Books.
- Saunders, Peter, & Williams, Peter. (1988). *The constitution of the home: Towards a research agenda*. *Housing Studies*, 3(2), 81-93.
- Scannell, Leila, & Gifford, Robert. (2010). Defining place attachment: A tripartite organizing framework. *Journal of Environmental Psychology*, 30(1), 1-10.
- Scowen, Reed. (1991). *A Different Vision: The English in Québec in the 1990's*: Don Mills, Ont.: Maxwell Macmillan Canada.
- Sennett, Richard. (2001). A flexible city of strangers. *Le monde diplomatique*, 23-25.
- Shamai, Shmuel. (1991). Sense of place: an empirical measurement. *Geoforum*, 22(3), 347-358.
- Shamai, Shmuel, & Ilatov, Zinaida. (2005). Measuring Sense of Place: Methodological Aspects. *Tijdschrift voor economische en sociale geografie*, 96(5), 467-476.
- Short, John R. (1978). Residential Mobility in the Private Housing Market of Bristol. *Transactions of the Institute of British Geographers*, 3(4), 533-547.
- Speare, Alden. (1974). Residential satisfaction as an intervening variable in residential mobility. *Demography*, 11(2), 173-188.
- Stedman, Richard C. (2003). Is it really just a social construction?: The contribution of the physical environment to sense of place. *Society & Natural Resources*, 16(8), 671-685.
- Taylor, Ralph B, Gottfredson, Stephen D, & Brower, Sidney. (1985). Attachment to place: Discriminant validity, and impacts of disorder and diversity. *American Journal of Community Psychology*, 13(5), 525-542.
- Temkin, Kenneth, & Rohe, William. (1996). Neighborhood change and urban policy. *Journal of Planning Education and Research*, 15(3), 159-170.
- Tuan, Yi-fu. (1974). *Topophilia a study of environmental perception, attitudes, and values*. Englewood Cliffs, N.J: Englewood Cliffs, N.J. Prentice Hall.

- Tuan, Yi-Fu. (1976). Humanistic Geography. *Annals of the Association of American Geographers*, 66(2), 266-276.
- Tuan, Yi-Fu. (1980). Rootedness and sense of place. *Landscape*, 24, 3-8.
- Van Criekingen, Mathieu, & Decroly, Jeani Michel. (2003). Revisiting the diversity of gentrification: neighbourhood renewal processes in Brussels and Montréal. *Urban Studies*, 40(12), 2451-2468.
- Warner, Sam Bass. (1968). *Streetcar suburbs the process of growth in Boston: 1870-1900*. New York: New York Atheneum.
- Wegmann, Jacob. (2006). *What happened to the three-decker?* Massachusetts Institute of Technology.
- Wellman, Barry, & Wortley, Scot. (1990). Different strokes from different folks: Community ties and social support. *American journal of Sociology*, 558-588.
- Whitelaw, J. S. (1971). Migration Patterns and Residential Selection in Auckland ,New Zealand. *Australian Geographical Studies*, 9(1), 61-76.
- Wicker, Allan W. (1979). Ecological psychology: Some recent and prospective developments. *American Psychologist*, 34(9), 755.
- Williams, Coupland, Justine, Folwell, Annette, & Sparks, Lisa. (1997). Talking about Generation X Defining Them as They Define Themselves. *Journal of Language and Social Psychology*, 16(3), 251-277.
- Williams, Daniel R, & Vaske, Jerry J. (2003). The Measurement of Place Attachment :Validity and Generalizability of a Psychometric Approach. *Forest Science*, 49(6), 830.
- Windsong, Elena Ariel. (2010). There is no place like home: Complexities in exploring home and place attachment. *The Social Science Journal*, 47(1), 205-214.

Winstanley, Ann, Thorns, David, & Perkins, Harvey. (2002). Moving House, Creating Home: Exploring Residential Mobility. *Housing Studies*, 17(6), 813-832.

Woolever, Cynthia. (1992). A contextual approach to neighbourhood attachment. *Urban Studies*, 29(1), 99-116.

Zucchi, John. (2007). *A history of ethnic enclaves in Canada*: Canadian Historical Association.