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SHELTERING THE UNDERBELLY OF SOCIETY:

ARCHITECTURE AS A MEANS OF ACHIEVING DIGNITY FOR THOSE LIVING IN A CITY'S RESIDUAL SPACES

by

Kevin Quan

Bachelor of Architectural Science, Ryerson University, 2008

A design thesis | project
presented to Ryerson University
in partial fulfillment of the
requirements for the degree of
Master of Architecture
in the Program of
Architecture

Toronto, Ontario, Canada, 2013

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Sheltering the Underbelly of Society: Architecture as a Means of
Achieving Dignity for Those Living in a City's Residual Spaces

Master of Architecture, 2013
Kevin Quan
Program of Architecture
Ryerson University

ABSTRACT

The attachment of the homeless to the city's residual spaces is a result of a
lack of choice, but in some instances, it is a preference. This thesis focuses
on the latter in addressing the housing needs of those who prefer to live
outdoors rather than in the institutionalized environment of emergency
shelters, or even permanent housing. It explores the role of architecture
in empowering independence, dignity, and security without socially
engineering the homeless and changing their lifestyle. This exploration is
informed by the works of architects, urban geographers, cultural critics,
artists and psychologists, among them the members of the Situationist
International, Bernard Tschumi, Donald MacDonald, Michael Benedikt,
David Harvey, Neil Smith, and Abraham Maslow. It proposes an alternative
scenario whereby those persons preferring to live outdoors may be safely,
decently, and innovatively sheltered independently in some of the many
residual spaces found on streets and in parks.

ACKNOWLEDGEMENTS

I wish to express my sincere thanks to the following people for their support this year:

CONTENTS

ix

LIST OF FIGURES

Matthew McConaughey:
> <http://1.bp.blogspot.com/_vv6jQGjbSOo/TQJUtY5_Cel/AAAAAAAAP2U/
> QCsOQWZR-50/s800/Matthew%2BMcconaughey-fd0002.jpg>

African man:
> <http://th04.deviantart.net/fs70/PRE/i/2010/300/e/6/face_stock_1_by_
> minorphicphoto-d31nu5i.jpg>

Barack Obama:
> < http://upload.wikimedia.org/wikipedia/commons/8/87/Barack_Obama,_
> official_photo_portrait,_111th_Congress.jpg>

Steve Jobs:
> < http://cdn0.sbnation.com/entry_photo_images/7237279/stevejobs_
> large_verge_medium_landscape.jpg>

Old man:
> < http://www.fereej.com/wp-content/uploads/2009/12/old-man1.jpg>

Fig. 4.2 Toronto homelessness facts, graphics by author
Statistics:
City of Toronto: Shelter, Support & Housing Administration. (2009). Street Needs
Assessment Results 2009. Retrieved from City of Toronto: http://www.toronto.ca/
legdocs/mmis/2010/cd/bgrd/backgroundfile-29123.pdf

City of Toronto: Shelter, Support & Housing Administration. (2010). Shelter, Support &
Housing Administration. Retrieved from City of Toronto: http://www.toronto.ca/housing/
pdf/quickfacts.pdf

Fig. 4.3 Gender distribution of homeless people in Toronto, graphics by author
Statistics:
City of Toronto: Shelter, Support & Housing Administration. (2009). Street Needs
Assessment Results 2009. Retrieved from City of Toronto: http://www.toronto.ca/
legdocs/mmis/2010/cd/bgrd/backgroundfile-29123.pdf

City of Toronto: Shelter, Support & Housing Administration. (2010). Shelter, Support
& Housing Administration.Retrieved from City of Toronto: http://www.toronto.ca/
housing/pdf/quickfacts.pdf

Fig. 4.4 Age distribution of homeless people in Toronto, graphic by author
Statistics:
City of Toronto: Shelter, Support & Housing Administration. (2009). Street Needs
Assessment Results 2009. Retrieved from City of Toronto: http://www.toronto.ca/
legdocs/mmis/2010/cd/bgrd/backgroundfile-29123.pdf

City of Toronto: Shelter, Support & Housing Administration. (2010). Shelter, Support
& Housing Administration. Retrieved from City of Toronto: http://www.toronto.ca/
housing/pdf/quickfacts.pdf

Third image:
> <http://alicectphoto.files.wordpress.com/2011/04/wodiczko-homeless-vehicle.jpg>

Right image:
> <http://3.bp.blogspot.com/_NeLRu2yTTNg/TMTch8HMTQI/AAAAAAAAAw/F3jwB9FtVBY/s1600/Homeless+ Vehicle+Project,+1988+Wodiczko.jpg>

Fig. 9.4 Furtive, Francois Roche

Top-left image:
> <http://www.new-territories.com/images/1998ter3.jpg>

Left & right image:
> Echavarria, P. M. (2006). Portable Architecture and Unpredictable Surroundings .Barcelona: Links International.

Fig. 9.5 Case Studies Matrix

Tepee:
> <http://www.likecool.com/Home/Outdoor/Tepee/Tepee.jpg>

paraSITE: see Fig. 9.1 credits

Refuge Wear and Body Architecture:
> second image from top:
>> <http://www.studio-orta.com/media/image_480_image.jpg>
> see also Fig. 9.2 credits

Homeless Vehicle Project: see Fig. 9.3 credits

Furtive: see Fig. 9.4 credits

Airstream Trailer:
> <http://www.fuelyourcreativity.com/files/airstream.jpeg>

Shipping Container Home:
> <http://assets.dornob.com/wp-content/uploads/2009/12/cargo-container-home-exterior.jpg>

Fig. 10.1 Concept diagram, compiled by author from various images

Villa Savoye:
> <http://naponechin.files.wordpress.com/2013/02/villa-savoye.jpg>

Explosion:
> <http://www.acclaimimages.com/_gallery/_free_images/0420-0907-0614-4442_munitions_explosion_o.jpg>

Dynamite:
> <http://nootropicdesign.com/projectlab/wp-content/uploads/2011/10/dynamite1-large.jpg>

Duct Tape:
> <http://blog.timesunion.com/opinion/files/2011/11/1130_WVspeech.jpg>

Base Map: City of Toronto Orthophoto via Ryerson University

Fig. 10.2 model of relationship between travel and home for the sheltered and unsheltered, model and image by author

Fig. 10.3 Complexity and diversity of homelessness, compiled by author with various images

Column 1: <http://www.theblogismine.com/wp-content/uploads/2012/06/1-In-3-Homeless-People-Are-Obese-New-Study-Suggests-01.jpg>

<http://deborahjeanne.files.wordpress.com/2011/02/homeless1.jpg>

<http://images.sodahead.com/profiles/0/0/0/6/0/4/1/9/1/Homeless-dogs-70615688618.jpeg>

<http://digital-photo.com.au/gallery3/var/albums/People/Street%20Photography/Shoeshine_homeless_and_woman_client_MG_6348-27.jpg?m=1335136003>

<http://digitaljournal.com/img/9/1/2/2/9/7/i/5/3/2/o/homeless_guy_1.JPG>

<http://www.shc.edu/theolibrary/graphics/homeless.jpg>

Column 2: <http://farm6.staticflickr.com/5175/5416868329_d3de203a36_b.jpg>

<http://www.calgaryherald.com/cms/binary/7696909.jpg>

<http://cinderbiter.files.wordpress.com/2013/02/homeless-dreads-and-dogs.jpg>

<http://www.flickr.com/photos/livenature/256941993/sizes/o/in/set-72157594222830728/>

<http://wvs.topleftpixel.com/photos/homeless_in_snow.jpg>

<http://84d1f3.medialib.glogster.com/media/e/9edff427b074a34bd5120855a30e99eb30cec15bf04cb46a623c5c2772efa7d7/r289124-1235012.jpg>

Column 3: <http://wallpoper.com/images/00/27/63/73/homeless-man_00276373.jpg>

<http://upload.wikimedia.org/wikipedia/commons/2/25/Homeless_man,_Tokyo,_2008.jpg>

<http://lygsbtd.files.wordpress.com/2011/11/homeless-guitar2.jpg>

<http://img.ehowcdn.com/og-image-tag/ehow/images/a04/c8/ea/interesting-facts-homeless-people-800x800.jpg>

<http://0.static.wix.com/media/78cf2a_beb917c06975277b9993bdae653a86dd.jpg_1024>

<http://static.guim.co.uk/sys-images/Society/Pix/pictures/2010/12/14/1292343007142/Young-person-homeless-hun-007.jpg>

Column 4: <http://images.mnn.com/sites/default/files/homeless_pets.jpg>

<http://www.jesus-is-savior.com/Reaching_The_World/homeless_man_on_street.jpg>

<http://2.bp.blogspot.com/-m5udYFJe7iE/TsJ1XSsv4FI/AAAAAAAAHU/Mf8ER1SipBs/s1600/homeless-man-w-dog.jpg>

<http://addictionblog.org/wp-content/uploads/2011/01/Drug-and-alcohol-abuse-and-the-homeless2.jpg>

<http://borderlessnewsandviews.com/wp-content/uploads/2013/05/homelessness.jpg>

<http://www.toonaripost.com/wp-content/themes/Yen/timthumb.php?src=

<http://www.toonaripost.com/wp-content/uploads/2012/01/New-
            Plan-to-Reduce-Number-of-Homeless-Families.
            jpg&w=580&zc=1>

Fig. 10.4 Early conceptual model of Light Post House, image by author

Fig. 10.5 Cardboard/plywood model of Light Post House, image by author

Fig. 10.6 Light Post House location plan
        Base Map: City of Toronto Orthophoto via Ryerson University

Fig. 10.19 Day-in-the-life use sequence
        Background Image: Google Streetview
        Image 1 (man pushing cart): <http://images.mnn.com/sites/default/files/homeless_pets.
            jpg>
        Image 2 (man approaching stair): <http://farm6.staticflickr.com/5175/5416868329_
            d3de203a36_b.jpg>
        Image 3 (man locking lifted stair): <http://www.theblogismine.com/wp-content/
            uploads/2012/06/1-In-3-Homeless-People-Are-Obese-New-Study-Suggests
            -01.jpg>
        Image 4 (man with dog sitting on platform): <http://wallpoper.com/images/00/27/63/73/
            homeless-man_00276373.jpg >
        Image 5 (man standing on platform): <http://deborahjeanne.files.wordpress.
            com/2011/02/homeless1.jpg>

Fig. 10.20 Street rendering
        Background Image: Google Streetview

Fig. 10.39 Funding scenario
        Loblaws: <http://mincanada.com/wp-content/uploads/2013/07/Loblaws.png>
        Metro: <http://www.metro.ca/data/flyers/logos/metro.gif>
        Sobeys: <http://tlchislett.files.wordpress.com/2011/05/sobeys-logo.jpg>
        Grocery Cart:
            <http://anarchobuddy.com/wp-content/uploads/2013/04/IP-shoppingcart.jpg>
        Bixi Logo:
            <http://upload.wikimedia.org/wikipedia/commons/thumb/5/53/Bixi_logo.
                svg/370px-Bixi_logo.svg.png>
            <https://fbcdn-profile-a.akamaihd.net/hprofile-ak-frc1/373069_76554328648_
                1023095778_n.jpg>
        Bixi Bicycle:
            <http://www.bonjourquebec.com/fileadmin/Image/medias/articles/
            actualites/VeloVueDroite_g.jpg>
        Speedy:
            <https://lh3.googleusercontent.com/-IjUo5188Sfk/UKe95l79WcI/
            AAAAAABkjLs/NCRMM_O_zyM/s0/photo.jpg>

Maaco:
> <http://atlanta.discountshoppingclub.com/product_images/uploaded_images/maaco-logo.jpg>

Active Green & Ross:
> <http://barrierotaract.com/wp-content/uploads/2012/06/Active-Green-Ross.jpg>

Wrench:
> <http://upload.wikimedia.org/wikipedia/en/9/98/Chrome_Vanadium_Adjustable_Wrench.jpg>

Screwdriver:
> <http://www.skiboardsonline.com/mm5/graphics/spruce/2013/spruce_screwdriver_large.jpg>

Note:
Bixi Bicycle Station and Bicycles source: Google 3D Warehouse.

Appendix A base map source: City of Toronto Orthophotos via Ryerson University

All other illustrations not listed in Chapter 10 are produced by the author.

All other illustrations in Appendices unless otherwise noted are produced by the author.

Figure i: Cover Art

COVER DESIGN

The collage design of the cover represents the complexity of the homeless population and the array of views on this subject. It is a collection of images, designs, facts and concepts that have influenced this thesis. It is blurry. It is unclear. It is ambiguous. It is not pretty. Neither is homelessness.

Modern architecture's ideal home

Villa Savoye by Le Corbusier

THESIS STATEMENT

Homeless people continue to live in wretched conditions in part because of the undesirable living conditions in institutional shelters and in part due to a lack of an alternative to accommodating their needs on the streets. Informal alternative approaches to sheltering this population with consideration to their lifestyle will help bring greater dignity to the outdoor homeless population.

BOOK STRUCTURE

Chapters 1-4 provide background, problem and direction for this thesis. In Chapter 2, the subject of residual space was explored in trying to understand what they are, how they have come about, and how they have traditionally been treated. Chapter 3 looks at the residual from a social perspective making the connection between marginalized space and marginalized people. Moss Park was also introduced as a residual space in Toronto. Chapter 4 explores the psychology and condition of the homeless population.

Chapters 5-7 explored the concepts of Abraham Maslow, Michael Benedikt, the Situationist International, Donald MacDonald, Bernard Tschumi and how those ideas can be adopted to the thesis.

Based on research from the previous chapters, Chapter 8 established an argument for interventions that remain on the streets, sidewalks, parks, and other residual spaces in the city. Chapter 9 investigated case study projects practiced with a similar take-off approach to this thesis.

Chapter 10 is the thesis project. The final chapter is a summing up or retrospective of how ideas for the thesis | project evolved over the course of this year and their influences.

BEGINNING

1.1 Introduction

One cannot walk or drive through a city without noticing residual spaces – empty lots and in-between spaces without any purpose - that lack any association with comfort, security, and liveliness. It is everywhere and nowhere. These physical yet ambiguous spaces go unnoticed on a day-to-day basis to the general public – the mainstream – which in their eyes see the residual as left-over, dangerous, untamed, and insecure. These accusations, however, are not made without basis, as crime and illegal activity do tend to take place within secluded and isolated areas. This stigma is also due in part to the planner's labelling of areas on his map as 'dead zones' – areas that are portrayed as unsafe, unproductive, and unintentional (Doron, 2000). To contemporary architects and urban theorists like Gil Doron, the adequacy of terms and labels such as 'dead zone, wasteland, void, etc.' used to describe these spaces are questionable. In these spaces, Doron discovers they are less empty than depicted to be, where abandoned lots, buildings, streets, and open public-spaces are transgressed, transformed and inhabited by marginalized communities.

These uncared-for spaces, along with its community are in and of itself marginalized in the city. In the public's eyes, one is the lowest quality of spaces, while the other, the lowest of humanity. It is here where generalizations, scrutiny, and discrimination can be escaped from. It is understood, then, that the connection between the residuals (as a space

and as a social group) is inseparable, that there is a mutual relationship which exists between our perceptions and depictions. Removing one also destroys the other. However, traditional "solutions" to left-over land and homelessness are through gentrification and institutionalization processes, respectively. Open public spaces become enclosed private space. Occupying them in a lifestyle beyond what is socially accepted becomes eradicated. In the writings of Ignasi de Sola-Morales, Gil Doron and Hans Van Dijk, the residual does not exist in reality, but is a fabricated colonialist term to justify the crime of land theft.

This leads to the issue of imposed values that many architects and urbanists have written about as a critique of modernism, including Jane Jacobs, and the Situationist International. Their disappointment was with the imposed abstract notions of values which were detached from the realities of urban life. Planners, in their ivory towers, decide what is considered a plausible solution based on the principles developed within the profession of "what ought to be good for people" (Jacobs, 2011, p. 11). New programs and forceful transformations without consideration to the needs of the neighbourhood did not guarantee success, as illustrated by Jacobs in various urban renewal projects.

Beginning in the late 1960s, the concern over rights to the city were expressed in the writings of sociologists, geographers, and architects including Henri Lefebvre, Kevin Lynch, David Harvey, and Neil Smith. They showed how capitalism and political power have influenced urban development over the past two centuries and how marginalized societies have been oppressed as a result. The fear that space no longer belonged to the people except those who could afford it, with private interest in investment, unsettled them. Their work questioned the meaning of the right to the city, expanding the definition beyond the "individual liberty to access urban resources: it is a right to change ourselves by changing society" (Harvey, 2008, p. 23). Acknowledging that homeless people – like anyone else – have rights to their own lifestyle, this thesis explores the role of architecture in empowering independence, dignity, and security of the homeless without socially engineering them.

1.2 Problem Statement

Residual spaces in the city are often neglected, such as the spaces under overpasses, at the edge of highways and off-ramps, the empty lot between buildings, etc. We neglect them because we fear them; it is an unknown with inherent risks; they are space untamed and un-colonized by architecture, where architecture is often associated with giving order to chaos, to the strangeness and peculiarity of something foreign to urbanity.

Homelessness, meaning people without private space, is understood by the general public to be a condition in residual space, part of the reasons why we feel uncomfortable being within them. To overcome this fear, the traditional approach over the past century was to demolish, rebuild, and transform. The residual loses its qualities, becoming homogenized and stitched back into normal society. By erasing marginalized spaces, marginalized people become dispersed and disbanded.

Similarly when faced with the problem of homelessness, architecture's role is also limited. Emergency shelters, temporary shelters, permanent housing, half-way houses, and so on all fall under the same type – institutional. The good intentions behind these systems and programs cannot be disregarded, they certainly are a solution for some but the real issue is that currently there are limited interventions for those who prefer residual spaces.

Terrain Vague

Void

derelict area

Dead Zone

NOTHINGNESS

space of uncertainty

wasteland

interstitial space

Lost Space

no man's land
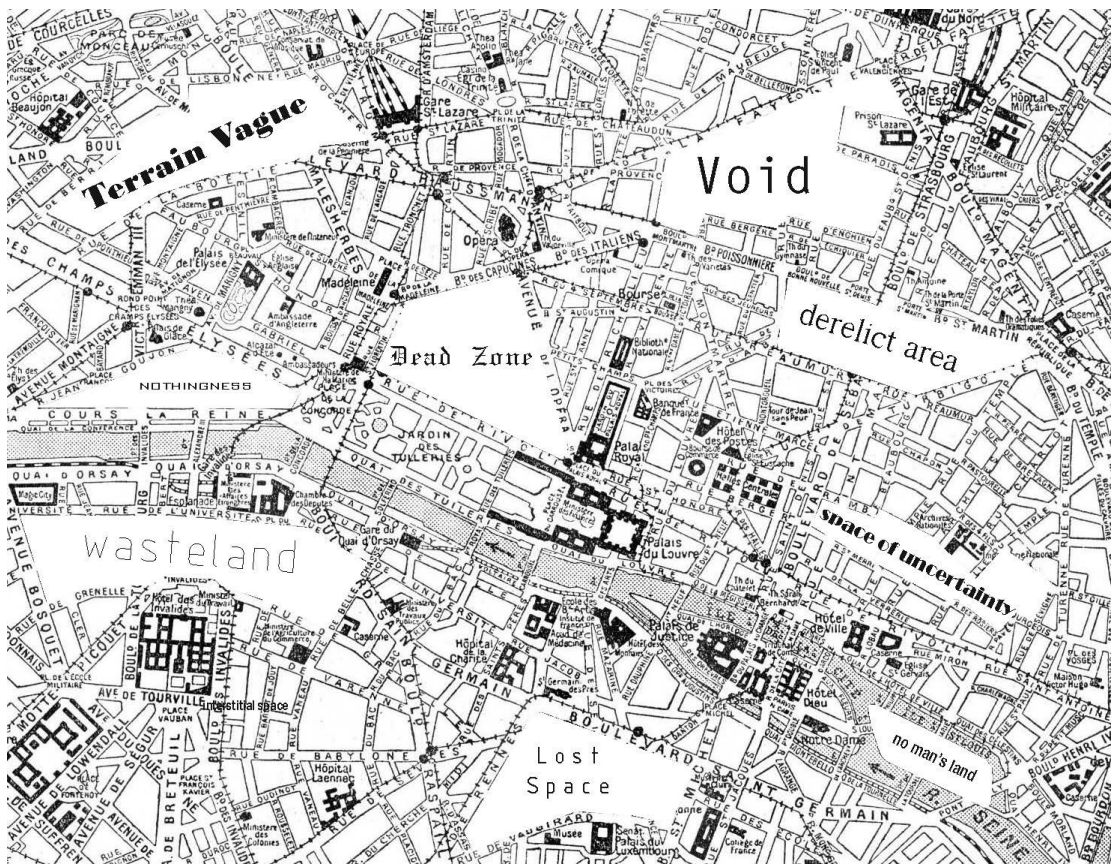
Figure 2.1 (above): 1932 map of Paris illustrating exhaustive list of terms that define residual space, image by author

RESIDUAL SPACE

2.1 Understanding Residual Space: A Planning and Urban

The modern city as we know it is orderly and organized to some form of zoning or planning regime based on land use. It is what Foucault described as medieval space- "a hierarchic ensemble of places" or "the space of localization" where things are placed according to the norms of society and tradition (Foucault, 2008, p. 15). We reside in houses, low-rise apartments, and high-rise condominiums. Commercial activities occur in shops, malls, and markets. Leisure and recreation takes place at the beach, squares, and parks. Mobility is supported by streets, highways, and sidewalks. This compartmentalization, with intentions to make a city more efficient ironically resulted in the unintended creation of ill-defined spaces at the edges of towns; between buildings, infrastructure, empty lots, and so on.

"The great haunting obsession of the nineteenth century was, as we know, history: themes of development and stagnation, themes of crisis and cycle, themes of accumulation of the past, the big surplus of the dead and the menacing cooling of the world" (Foucault, 2008, p. 14). Yet two centuries later, learning from the mistakes of the past never fully transpired. Modern cities all over the world are perplexed with these ambiguous spaces, many of which are a direct result of the mono-functional infrastructures of mobility, the planning profession's oblivion to the three-dimensionality of the urban environment, and the architect's hermetic designs that fail to engage the public.

The issue of these left over spaces lie not only in their emptiness and underutilization but also their effect on the urban environment. Open space in the form of parking lots, empty fenced-areas, and the no-man's land around and under elevated infrastructures sever the continuity of the urban fabric, ultimately creating an undesirable and un-walkable streetscape. Moreover, the relationship of adjacencies between building-building, building-park, building-square, and building-infrastructure have not been considerations of the designer. Hence, "In this all too common process, urban space is seldom even thought of as an exterior volume with properties of shape and scale and with connections to other spaces" (Trancik, 1986, p. 1).

Residual spaces are as vague and confusing as the exhaustive list of terms used to describe them over the last half-century. Some examples include Terrain Vague (de Sola-Morales), Dead Zone (Doron), Lost Space (Trancik), interstitial space, wasteland, void, nothingness, post-architectural voids, conceptual Nevada (Koolhaas), derelict area, urban desert, space of uncertainty, free space, nameless space, white area, blank space, temporary autonomous zone, ellipsis space, space of indeterminacy, brown fields, liminal space, no man's land, and urban void; a list of terms collected from various literature. The difficulty in defining these spaces is due to the fact that each one is slightly different in its history, development, condition, scale, and the interpreter's subjectivity. For instance, the term post-industrial zone can describe something at the scale of a single building, a large site, or an entire city as in the case of Detroit (Doron, '... those marvellous empty zones on the edge of our cities': heterotopia and the 'dead zone', 2008, p. 208). Another example can be found in the Urban Task Force's 1999 report titled "Towards an Urban Renaissance" chaired by Lord Richard Rogers in the UK. The report examined the causes of urban decline to establish a vision for cities based on the principles of design excellence, social wellbeing, and environmental responsibility. The underlining goal was to minimize encroachment of development onto green fields by investigating the potentials of derelict lands. However, in the search for these lands inside British cities, there was difficulty in determining what was considered derelict and which was not, therefore two very different figures were given to indicate the amount of these spaces

(Doron, The Dead Zone and the Architecture of Transgression, 2000, p. 247).

According to the Oxford Dictionary, "residual" is defined as "remaining after the greater part or quantity has gone." 'Residual' originated in the 1550s of the root word 'residue' from the mid-1300s, from the Latin word residuum, meaning "a remainder," "remaining, left over," and "remain behind" (Residual, Oxford Dictionaries, 2012) (Residual, Online Etymology Dictionary, 2012) (Residue, Online Etymology Dictionary, 2012).

With various terms, come various definitions. Beginning with the term terrain vague (de Sola-Morales, 2007), architect Ignasi de Sola-Morales meticulously breaks down the French term, which he claims is too problematic to be captured in a single English word or phrase. 'Terrain' in French carries a more urban quality – a ground fit for construction of the city – whereas in English the term has an agricultural or geological meaning. 'Vague' has Latin and German origins and could be understood in three ways in English – wave, vacant, and vague. The German word 'woge' refers to movement, oscillation, instability, and fluctuation. From the Latin 'vacuus' meaning vacant, vacuum, empty, unoccupied, yet also free, available and unengaged. The third, also of Latin origin is 'vagus' giving 'vague' in English which means indeterminate, imprecise, blurred, and uncertain. De Sola-Morales uses the term terrain vague to describe the empty, abandoned spaces "outside the city's effective circuits and productive structures" which include post-industrial areas, railway stations, ports, unsafe residential neighbourhoods, and contaminated places (de Sola-Morales, 2007, p. 110). Summed up in three words, these spaces are "un-inhabited, un-safe, un-productive" (de Sola-Morales, 2007, p. 110).

Gil M. Doron, a writer, instructor, and Ph.D. candidate at the Bartlett School of Architecture, uses the term 'Dead Zone' to describe the similar urban or non-urban conditions. Two readings of this term could be interpreted, 'dead' implying not the literal geographical location but their conditions and the fact that they are in fact 'not zoned'. Doron describes these places as "neither slums (with poor but defined communities) nor 'open spaces' in the city, nor 'natural' ones," emphasizing on "places that look

11

empty, and appear as ones which do not have any use (any more)" (Doron, The Dead Zone and the Architecture of Transgression, 2000, p. 247). Examples of these dead zones are disused harbours and train yards, abandoned barracks, closed mining sites or industrial areas, abandoned neighbourhoods, empty lots, spaces at the edge of highways and under bridges.

"Lost Space", a term coined by Roger Trancik in his 1986 book, titled "Finding Lost Space: Theories of Urban Design" (Trancik, 1986). It is a broader, more encompassing term than Terrain Vague or Dead Zones as defined by Sola-Morales and Doron, respectively. In addition to the examples listed by those two terms, 'lost space' also included the ambiguous spaces at the base of high-rise buildings that appear as neither public nor private, the sunken plazas that are isolated from pedestrian traffic, open-air parking lots scattered across the urban core, deteriorated parks and public housing projects.

2.2 Development of the Residual
2.2.1 Modernism
Mass production marked the beginning of the industrial society and since then, changed the formation of the city (Shane, 2006, p. 57). Schumacher and Rogner recognized the effects of Fordism on the spatial system of the city beginning with what they called Phase 2, "the assembly line concept is applied to an overall urban complex" which in turn created the "city as machine" (Schumacher & Rogner, 2012). The building became a product of the assembly line at the River Rouge plant when several single storey buildings were joined together along its length with the flexibility of expansion along its length. Furthermore, Phase 3 increased in scale when Ford proposed the idea to set up satellite plants across the country, connected by infrastructural networks.

This idea of decentralization and distribution was further stressed during the 1933 CIAM IV meeting in Athens, Greece with a focus on The Functional City. Mark Wigley writes "the key move of the Athens congress of CIAM was precisely to place greater emphasis on the idea of networks," engendering the horizontal expansion of the city (Wigley, 2001, p. 95).

THE CITY AS AN EGG

boiled — ANCIENT

fried — 17-19 CENT.

scrambled — MODERN
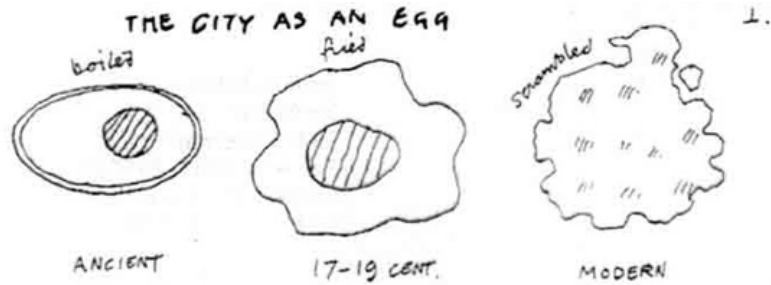
Figure 2.2 (above): "The City as an Egg", Cedric Price

Circulation was the subject that connected the previously established key functions of the city during the first congress in 1928 – dwelling, working, and recreation. The separation of functions required daily commute and even further commute for those who could not afford to live in the city centre, becoming dependent on the automobile and other public transit infrastructure. Putting seriousness aside for a second, Cedric Price provided us a playful interpretation of city morphology in the form of three styles of eggs (Figure 2.2). The ancient city was "hard-boiled" with a more defined core fixed within the city wall. The city then became a "fried egg" with a loosely defined edge, made possible by faster transit methods. Lastly, the "scrambled egg" defines the modern city today, which is evenly distributed across the landscape with no real edge, only pockets of intensity or what Joel Garreau calls "Edge City" (Shane, 2006, p. 64). The city grew wider when it flourished but at times of recession, the city did not and could not just shrink back in size. As a result, pockets of land became derelict, either abandoned or no longer needed for various reasons. What is left are residual spaces, similar to a slice of Swiss cheese – a blanket penetrated by voids scattered throughout its surface.

In addition, Trancik blames the modern movement during its peak between 1930 and 1960, criticizing the "abstract ideals for the design of freestanding buildings; in the process it ignored or denied the importance of street space, urban squares and gardens, and other important outdoor rooms" (Trancik, 1986, p. 8).

13

2.2.2 Mass Transit Systems

The precondition of automobile dependence was mass production and developments in asphalt and road construction. Similarly, streetcars with designated roadways and in particular the railroad created a whole series of residual spaces directly adjacent to them. The organization of the industrial society relied heavily on the rail network then later the road network. As stated by Pierre Belanger, "the history of urbanism in North America starts in the mud," describing the condition of the city's surfaces well before the invention of the train, automobile, or airplane (Belanger, 2006, p. 243). It presented obstacles to mobility, ultimately compromising speed and efficiency – the quintessential value of modernity and industry. The exposure to a continuous freeze/thaw cycle in the North American context required a driving surface more resilient to muddy conditions after precipitation or thawing in the spring. Asphaltic roads became more ubiquitous than the railway in the past century and as a result, had a larger impact in the creation of residual spaces.

Asphalt pavement was invented by Edward Joseph De Smedt, a Belgian chemist and professor at Columbia University, in 1872 where he laid out his new invention in front of Newark City Hall in New Jersey (Belanger, 2006, p. 244). The new material was weatherproof, relatively inexpensive to reproduce over long distances, accommodated different topographical conditions, and could be engineered to various vehicle types and volume. The development of asphalt was a catalyst for many more improvements to infrastructures of mobility. What asphalt development engendered over the next century was astonishing.

Mass production, along with the smooth asphalt and concrete roads, allowed a greater number of people access to the automobile. It became ingrained into the American lifestyle, but the side-effects of which are devastating urbanism today. Highways, overpasses, turnpikes, off-ramps, interchanges, thoroughfares, and parking lots have dominated the urban environment. In cities like Detroit or Los Angeles, the devotion of land towards the movement and storage of automobiles can be as high as 75 to 80 percent (Trancik, 1986, p. 5). The Trans-Canada Highway, like the Interstate Highway System in the United States, was constructed

with intentions to connect major cities across the nation for the efficiency in transportation of goods. As a result, isolated highways bisect many Canadian cities in the form of overpasses or berm roadways with a capacity to bypass the city. The highway becomes a residual space, inserting itself between two parts of the city.

2.2.3 Post-Industrial Society

A misconception of the post-industrial society is that we no longer produce or manufacture goods, when in fact we are still very much a nation generating products. The term was coined by Daniel Bell when he first developed the thesis in 1959, and later publishing the book titled *The Coming of Post-Industrial Society: A Venture in Social Forecasting* in 1973.The subject of the book, he wrote, is a "social forecast about a change in the social framework of Western society" (Bell, 1973, p. 9). Of the five components to the term, the economic interests us the most. It is not that Western societies no longer produced goods, but industrial or manufacturing sectors have declined to a point where the service sector now accounts for more employment and wealth generation. At the time the book was written, the United States was the only country in the world where this phenomenon occurred (The Economist, 1999) but Bell predicted that this shift will migrate to other cities as well. How this new economy has affected the urban environment is the dereliction of land, previously operated by industry that have moved out and moved on elsewhere, in locations promising a higher return-on-investment in a shorter period of time.

The relocation of factories, warehouses, military bases, obsolete infrastructure, vacated office and residential buildings, have created vast areas of ambiguous land. Most of these spaces also operate valuable waterfront spaces or within the urban centre, that were once desirable for industries to easily transport or shift from one type of transport method to another.

2.2.4 Zoning and Urban Renewal

Zoning and urban renewal were allied approaches to planning during the 1950s and 1960s with benevolent intentions, but misguided plans to "clear

the ground, sanitize, and promote human welfare through the segregation of land uses into discrete zones and the substitution of high-rise towers for ground-level density" (Trancik, 1986, p. 12). The separation of functions, between living and working space, segregated the city resulting in several undesirable impacts to the city. It engendered homogenized districts, while segregating them by traffic arteries where many residual spaces can be found. The clearing of land transformed built form into parking lots or empty spaces, now awaiting development.

These wastelands without any formal use but anticipating purpose are a strategy of planning which Doron calls "suspension" (Doron, The Dead Zone and the Architecture of Transgression, 2000, p. 260). Suspension refers to the postponement of new plans for a residual space, after it has been abandoned or no longer used. Examples given include the old harbour of Tel Aviv and Amsterdam, and military barracks in Copenhagen; all of which have terminated uses since the 1950s, 1979, and 1969, respectively (Doron, The Dead Zone and the Architecture of Transgression, 2000). Unengaged from any formal activities, these spaces have been taken over and informally used by squatters and the like over the last couple of decades.

The reason why the squatters were not removed was because city authorities did not have a plan to repurpose these spaces until the late 1990s. Without any concrete ideas, suspension therefore is about 'planning' for 'future planning'. Abandoned and no longer supporting its previous intended uses, residual spaces are question-marks on a planner's map. Space is defined, boundaries are marked, and a decision for future planning is made. What that plan is and when it would be implemented, were unknowns. The city can then be understood as a warehouse, where residual space is its stock of free land, ready to be used and overtaken. Like a music record put on repeat, looping infinitely through time, the planner's hand, suspended above the needle is the only thing that can silence the tune. What is unaccounted for are the people who are enjoying this piece of music.

THE UNDERBELLY OF SOCIETY

Figure 3.1 (left): "Courtyard of a House in Delft", original painting by Pieter de Hoogh, 1658

Figure 3.2 (right): "The Musical Party", original painting by Pieter de Hoogh, 1677

3.1 Understanding Residual Space: A Social and Cultural Perspective

On the one hand residual spaces may be deemed as an eyesore, waste of land, an inconvenience, but on the other it is of importance to the city. An article in the March 1994 issue of Architectural Review magazine titled "Interstitial Importance" discusses the significance of intermediate spaces that are lacking in the city. "Interstitial" was defined in the article, using two paintings by Pieter de Hoogh, a seventeenth-century Dutch painter, titled *The Musical Party* (1677) and *Courtyard of a House in Delft* (1658). Both paintings portray a courtyard space with a quality of "ambiguity and spatial variety, an intermixing of public and private," which provides "an ability to be involved in two spheres at the same time" while allowing the experience of this "sequence of social and spatial events" (Architectural Review, 1994, p. 4). These once desirable and social spaces only now exist in the form

of underutilized land like on the set of a dystopian film. Many authors see the issue as a result of events dating back to the modernist era including but not limited to planning, functionalism, and the dependence on the automobile. Our society can be described as "the society of alienation, the mass society, which provides no interstitial space for the life of the individual, either socially or physically" (Architectural Review, 1994, p. 4).

Questioning the validity of the terms that describe residual space, Gil Doron took on a global dérive (a term used by the Situationist international), and explored 20 sites in 20 cities around the world to find out whether they hold any truth or not. The sites are similar in size (a few square kilometers), location (within the center of the city), but varied in uses: some were neighbourhoods, post-industrial zones, harbours, or mixed use (Doron, The Dead Zone and the Architecture of Transgression, 2000, p. 256). Although varied in governance, culture, race, etc., the old Harbour of Amsterdam, King's Cross in London, Tacheles in Berlin, downtown Los Angeles, the old harbour of San Francisco, and Maxwell Street in Chicago share one commonality: these spaces are far from empty, void of activity, and life. It is in these spaces where he discovers another part of society rarely discussed and seen:

> *"…underneath the maps and outside the discourse, which have tried and failed to cover the whole territory of the city, worlds exist full of unwritten history, overlooked communities, unseen possibilities, a world with a different order, but also architecture: The Architecture of Transgression." (Doron, The Dead Zone and the Architecture of Transgression, 2000, p. 252)*

It is also here where he discovers the diverse population that reside or make use of these spaces. They include artists, boat dwellers, immigrants, gays, sado-masochists, squatters, and homeless people, all of whom are scrutinized in society one way or another. It is where sexuality is explored, where rave parties are hosted, and where various other activities occur including prostitution, illegal dwelling, galleries, cultural centres, and shops (Doron, The Dead Zone and the Architecture of Transgression, 2000, pp.

Figure 3.3 (above): residual space transgressed, Gil Doron

250-251). Their actions challenge spatial constraints and accepted norms in society – what Doron calls the Architecture of Transgression – whereby the existing conditions of site and building are claimed and transformed to better suit the needs of this group. Changing industrial warehouses to galleries; vehicles, portacabins, and circus wagons into homes; and abandoned factories into rave party venues. What would normally take months of planning and execution can be done in several hours and gone the next day. Residual spaces offer this group the freedom and flexibility that cannot be found or matched anywhere else. The lack of governance and control are the sole reasons that attract this group to the residual in the first place. It is here in the city where refuge is found, away from mainstream society that "offers them an abusive identity, a crushing homogeneity, a freedom under control" (de Sola-Morales, 2007).

Residual space is therefore a space of the marginalized. The space in which activities not recognized by mainstream thought and practice are feared and avoided. Their physical boundaries are blurred, as well as their existence in the fourth dimension, that of time. Dead zones not only vary in scale but also in time. On any given day at any given time, a space may

19

become temporarily a residual space. It "occurs every night in the emptied office districts, in parks, squares and streets, every day in residence-only neighbourhoods" (Doron, The Dead Zone and the Architecture of Transgression, 2000, p. 257). This statement is supported by Jane Jacobs, in her observations of four parks in Philadelphia: Logan Circle, Rittenhouse, Franklin, and Washington Square (Jacobs, 2011). Although similar in size and distance from city center, the parks differed in many ways because of their immediate context. The mixture of uses in and around those parks had direct effects on the livelihood of the space. Some of the more successful parks were visited throughout the day by varied groups of users, in sequence, including early-bird walkers, followed by residents on the way to work, the commuters who cross the park for work, mothers and their small children, employees on their lunch break, and so on. Where open space failed and became temporarily residual or what Jacobs' called "vacuums" were parks that lacked this diversity. These parks only served one group throughout the day, such as the office workers on their lunch breaks, while at other times they remained empty or occupied by "the homeless, the unemployed, and the people of indigent leisure" (Jacobs, 2011, p. 120). Misrepresented as the space of absence, the residual is also "promise, the space of the possible, of expectation" (de Sola-Morales, 2007, p. 110). They are a burden to some, yet opportunities to others.

The relationship between residual spaces and marginalized people is not new. Kevin Lynch described the condition of the isolating and alienating design of the medieval Islamic city, especially in its interstices. He explained that "paths between quarters, other spaces, and the ground outside the city walls were no-man's-lands, places for intergroup battles, the territory of misfits and criminals, that growing underclass caught between the village, guild, and army" (Lynch, 1990). In short, these are places for people who don't belong, people who fall through the categories under normal society.

Lynch suggests that there is a need for freedom yet also control in open spaces, for the fact that they are "the common ground for movement and communication, and likewise the place for deviance and crime" (1990, p. 413). For these reasons of difference, we have come to fear these places. When we look into derelict and deteriorating areas as well as the people

who occupy them, what we see doesn't reflect us – we don't see ourselves in it. De Sola-Morales believes that "we inhabitants of the metropolis feel the spaces not dominated by architecture as reflections of our own insecurity, of our vague wanderings through limitless spaces that, in our position external to the urban system, to power, to activity, constitute both a physical expression of our fear and insecurity and our expectation of the other, the alternative, the utopian, the future" (de Sola-Morales, 2007, pp. 110-111). To de Sola-Morales, there is an unease with residual spaces from a social perspective because of crime that may have happened there.

The cultural view on residual space is that they are the space of fear, anxiety, and uncertainty. These constructed views, to Gil Doron, Hans van Dijk, and Zygmunt Bauman, are colonialist fabrications. In Colonizing the Void, van Dijk stated that "as far as I am aware, no one has ever written a cultural history of the void. But it would coincide to a large extent with that of colonialism" (Doron, '... those marvellous empty zones on the edge of our cities': heterotopia and the 'dead zone', 2008, p. 205). It was an easy excuse to put a label on an area and call it empty and void of activity, an excuse allowing those in power to change it at the expense of those who call residual spaces home.

3.2 Constructive Destruction

In overcoming our fears, the traditional approach to residual space and marginalized people are strategies of gentrification and expropriation. It is as much of a xenophobic response as it is a colonialist one. It is the cleansing of the streets, because residual spaces are 'dirty'. Lynch says "we want spaces that reflect the complexities of our social life," which, in every way is a benevolent thing to do (Lynch, 1990, p. 415). But it is also for this same reason that when spaces don't reflect 'us', we destroy and transform them until it does. "The main characteristic of the contemporary individual," de Sola-Morales says, "is anxiety regarding all that protects him from anxiety, the need to assimilate the negativity whose eradication is seemingly the social objective of political activity" (2007, p. 111). This view is also supported by Doron, who writes "these spaces are named 'dead zones' when the hegemony wishes to reuse them and confront the reality on the ground in which they were appropriated by marginal groups" (2008, p. 209).

The re-planning, redeveloping, revitalizing and "Renaissanciation" does not delete the systems that produced these voids, but simply destroys

the evidence of the crime (Doron, The Dead Zone and the Architecture of Transgression, 2000, p. 252). The introduction of architecture, in the traditional sense, to these spaces "seem incapable of doing anything other than introducing violent transformations, changing estrangement into citizenship, and striving at all costs to dissolve the uncontaminated magic of the obsolete into the realism of efficacy" (de Sola-Morales, 2007, p. 112). In other words, architecture destroys the messy vitality of the dead zone and the qualities of freedom, outside the urban system, the norm, and the regulated. Traditionally, architecture imposes "limits, order, and form," whereby spaces become cultivated and homogenized by the sovereignty of the architect (de Sola-Morales, 2007, p. 112). It has been an "instrument of organization, of rationalization, and of productive efficiency" capable of transforming voids into built form (de Sola-Morales, 2007, p. 112). All of which are forms of legitimization of human existence, power, control, and authority.

The quest for order in the modern world stimulated many urban renewal plans throughout history, the most widely known being Haussmann's rebuilding of Paris in the 1860's. The demolition and reconstruction of Paris dissolved the working class and poorer population, who once dwelled within the center of the city, towards the arrondissements, as a result of the 'suspension' of space during its construction phases and the increased rent or property taxes. The widening of boulevards, with straight sightlines was a response to riots that occurred previously, where barricades or groups of rioters (the marginalized) now can easily be suppressed with artillery fire from a distance.

In America to a lesser extent, as written about by Jane Jacobs, the effects of gentrification had similar effects across the country. Morningside Heights and East Harlem in New York were two examples discussed. Morningside Heights in the 1950's was a neighbourhood on the verge of becoming a slum, having streets that people were afraid to walk on, and as a result, city authorities demolished the most dilapidated area and replaced it with a middle-income co-op housing project, shopping centre, and landscaping (Jacobs, 2011, pp. 8-9). This transformation, although with good intentions, did not successfully revive the area. According to Jacobs, it only

sped up the deteriorating process even faster (2011, p. 9).

At a housing project in East Harlem, tension surrounded a rectangular lawn because of the "dishonest mask of pretended order, achieved by ignoring or suppressing the real order that is struggling to exist and to be served" (Jacobs, 2011, p. 21). Jacobs interviewed a tenant, who expressed her dismay at what has been done to her neighbourhood: "…Nobody cared what we need. But the big men come and look at the grass and say, 'Isn't it wonderful! Now the poor have everything!" (Jacobs, 2011, p. 21).

Doron's strategy of "suspension" resonated most closely with Torontonians at Tent City between 1998 and 2002. Located on a vacant site just south of the Gardiner Expressway between Parliament and Cherry Street, Tent City was a shanty town with about 100 squatters who lived in self-constructed tents and shacks (Crowe, 2007). It attracted a lot of media attention when the homeless people living there were being evicted as a result of Home Depot's 1999 decision to build a big-box retail store on the site which they now owned. Not having been able to successfully build the store, Home Depot began evictions in September 2002. One article quoted then mayor, Mel Lastman, saying 'We've got shelter space available…Home Depot has the right…to have trespassers removed off their property, and they exercised that right today using their own people' but the article also recognized that "the squatters built the shantytown rather than stay in homeless shelters" (Canadian Broadcasting Corporation (CBC), 2002). The site has been 'suspended' for more than a decade with no development, and certainly no homeless settlement. On October 29, 2010 the property was sold in joint-venture to three developers: Castlepoint Realty Partners, Cityzen Development Group and New York-based Continental Ventures (Wong, 2010). Presently in 2013, the site still remains vacant – a demonstration of eviction to no end.

Figure 3.5 (above): cabin at Tent City, September 2001

Figure 3.6 (above): Tent City after evictions, September 2002

These examples of dissolving the marginalized population and imposing values onto them are what I call acts of constructive destruction. In *The Death and Life of Great American Cities*, Jacobs was against the planners' and architects' modernist reliance on doctrines purely based on ideas of 'how cities ought to work and what ought to be good for people and businesses in them," without an understanding of what the community lacks and want (2011, p. 11). These interventions not only disregard the marginalized, but also remove them from their place of refuge. What 'ought to be good' may not be good to everyone.

3.3 Spatial Freedom

*"…people who get marked with the planners' hex signs
are pushed about, expropriated, and uprooted much as if
they were the subjects of a conquering power. Thousands
upon thousands of small businesses are destroyed,
and their proprietors ruined, with hardly a gesture at
compensation. Whole communities are torn apart and
sown to the winds, with a reaping of cynicism, resentment
and despair that must be heard and seen to be believed."*
(Jacobs, 2011, p. 7)

*Figure 3.7 (above): resistance against the
war on spatial freedom, image by author*

The issue with acts of constructive destruction is related to one's right
to space and lifestyle. Beginning with Henri Lefebvre's "Right to the
City," published in 1968, suggested a need to focus more on the social
aspects of life rather than the ones driven by "the society of consumption"
(Lefebvre, 1995). David Harvey in his article of the same title published
40 years after, show how capitalist society and the system of power have
influenced urban development and oppressed the marginalized population.
Neil Smith, a student of Harvey, showed how public policy and the
private market working in unison went against minorities and in particular,
homeless people.

Harvey states that because of the "hegemonic liberal and neoliberal market logics," we tend to favour the rights of private property and profits more so than any other kinds of rights (Harvey, 2008, p. 23). These notions have been the underlying drivers of 'constructive destruction', the 'reclaiming' of space, and gentrification. Therefore, the right to the city to Harvey was not only a right to access urban resources – in our case residual space – but also the right to change society by being a part of urban processes. Having a voice in the transformation of the city and not just subjected to change imposed on us by the system, should be more valued by society. "The freedom to make and remake our cities and ourselves," he argues, "is one of the most precious yet most neglected of our human rights" (Harvey, 2008, p. 23). Homeless people in our society have very limited choices, other than the choice of deciding where to stay for the night or being outside the system.

Harvey also explained how Haussmann's Paris, and the United States in the 1940s and -60s have become spectacles, driven by consumerism and privatization. Because "cities have arisen through geographical and social concentrations of a surplus product," capitalists need to produce enough of it to create surplus value (Harvey, 2008, p. 23). This continued growth demands resources (human and material) which ultimately affect how property has become commoditized. Space, comes at a price and exchange-value has become more important than ever before. There is "freedom of choice" in contemporary urban life, "provided you have the money" (Harvey, 2008, p. 31). What this created then, is the spatial segregation of rich and poor, what Marcello Balbo calls "microstates," which include private schools, gated communities, golf courses, privatized public space, and so on (Balbo, 1993). In Jacobs' view, the rich drive out the poor but we cannot ignore the fact that "white flight" is a phenomenon that has been well documented; one example is Colin Gordon's book titled Mapping Decline: St. Louis and the Fate of the American City about the decline of St. Louis around the Pruitt-Igoe site in the 20th century. People with money can easily acquire property and eradicate those less fortunate, "since it is the poor, the underprivileged and those marginalized from political power that suffer first and foremost from this process" (Harvey, 2008, p. 33).

These literature and examples of spatial freedom in the city illustrate the inadequate responses to residual space and homelessness. It is not the intention of this thesis to find a solution to social equity, but in highlighting the challenges we as a society face, may point us in the right direction.

3.4 Toronto`s Residual: Moss Park

The most visible population of street dwellers in Toronto can be found in the Moss Park area. In our expanded definition of the residual borrowed from various authors, it was established that any space at certain times throughout the day can become residual based on their conditions and use, not limited to abandoned sites but also inclusive of well-intended public space including parks and sidewalks. Moss Park is one such area in Toronto that represents a residual space.
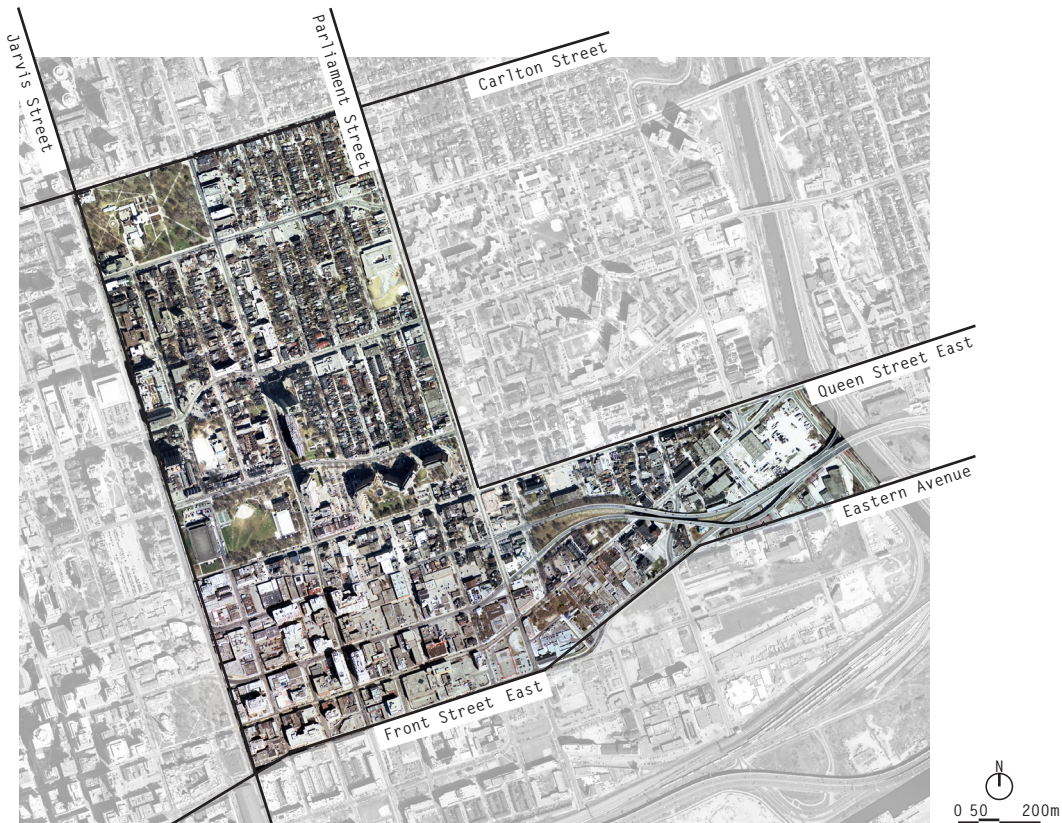
Moss Park is located east of Yonge Street and bound by Jarvis Street on the west, Carlton on the north, Parliament, Queen Street East and Don River on the east and along the south are Front Street East and Eastern Avenue. Originally, this area was part of a 100 acre property owned by William Allan, a wealthy Toronto banker who built his estate in 1830 on the same site where the city park is today (Dunkelman, 1999). After his death in 1853, Allan's estate was left to his son George William Allan who subdivided the property (Dunkelman, 1999). In 1962, Victorian homes that were on some of these properties were demolished to make way for social housing developments at the intersection of Queen and Parliament Street (Dunkelman, 1999).

Figure 3.8 (opposite): Moss Park boundary
Figure 3.9 (below): Moss Park adjacent communities

Cabbagetown

Regent Park

Church-Yonge Corridor

Waterfront Communities

0 50   200m
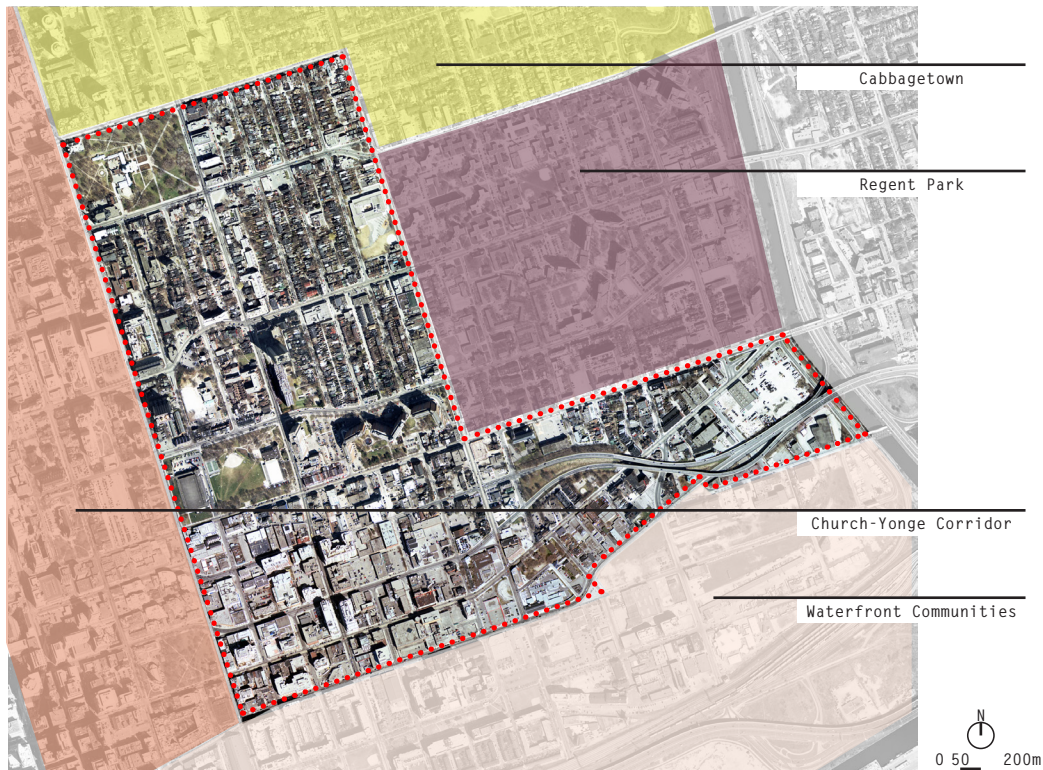
Population by Age Group

Working Age 25-64: **73%**

Youth 15-24: **11%**

Seniors 65+: **9%**

Children 0-14: **8%**

Population Compared with the City of Toronto

Working Age 25-64: **26.80%**

Youth 15-24: **-15.80%**

Seniors 65+: **-40.70%**

Children 0-14: **-49.00%**

Population by Age and Gender

Income Distribution by Groups
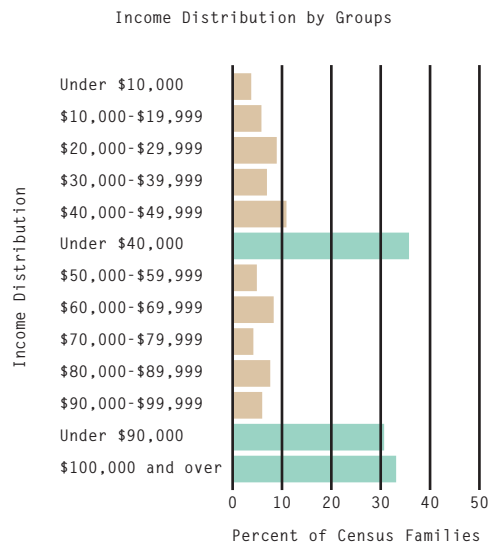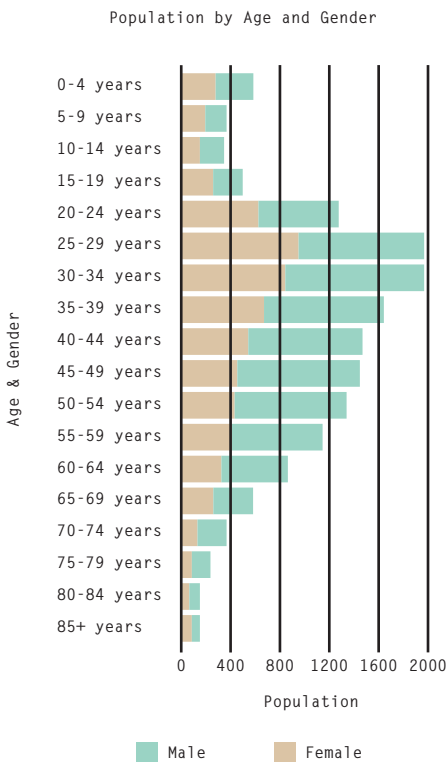
Figure 3.10 (top, left): Moss Park Population by Age Group*
Figure 3.11 (top, right): Moss Park Population Compared with the City of Toronto*
Figure 3.12 (above, left): Moss Park Population by Age and Gender*
Figure 3.13 (above, right): Moss Park Income Distribution*
Figure 3.14 (opposite): Languages Spoken in Moss Park*

*Source: City of Toronto: Moss Park Neighbourhood Profile

Home Language

|		
English:	**82.77%**	
French:	**0.82%**	
Not English or French:	**13.84%**	
Multiple Languages:	**2.45%**	

Top 10 Minority Languages

Language	Percentage
Chinese	3.27%
Spanish	1.46%
Amharic (Ethiopian)	0.82%
Tagalog (Filipino)	0.70%
Japanese	0.64%
Russian	0.53%
Serbian	0.53%
Arabic	0.47%
Persian (Farsi)	0.47%
Korean	0.47%

Since the 1960s, this area became known to Torontonians as one of the most crime ridden and poorest areas in the city. It is bound by four communities including Regent Park which was a social housing project in the late 1950s but currently undergoing an urban renewal plan to implement both market and social housing projects, Waterfront Communities (West Don Lands) also undergoing residential redevelopment, Church-Yonge Corridor, and Cabbagetown, both of which are known to be home to middle and higher income families.

Within the block just north of Queen Street are seventeen (including the three previously mentioned) social housing projects operated by the Toronto Community Housing Corporation. Over one-third of the families in Moss Park have a household income of less than $50,000 while the other two-thirds have household incomes between $50,000 - $100,000 and over $100,000. Interestingly, 73% of the population belong to the working age group of ages 25-64, 11% are youth between ages 15-24, 9% are seniors 65 years old and over, and the remaining 8% are children under the age of fourteen. Despite statistical information, the group that falls through these figures and unaccounted for are homeless people, which, in a sense mean that they don't exist.

Homes First Society

Maxwell Meighen Centre

Harbour Light Centre

Fred Victor

The Gateway

Fred Victor

Figure 3.15 (above): Social services within the Moss Park area.

Note: for additional site information, please see Appendix A

The concentration of homeless people in Moss Park is due to the fact that there are several shelters and social services available to people in need. The area is home to institutions like the Harbour Light Centre, Maxwell Meighen Centre, The Gateway, Fred Victor, and Homes First Society. Despite the amount of investment, there are still people who prefer the streets, evidently visible on any given day or night in Moss Park. Sidewalks, park space, storefronts after hours, alleyways, etc. are transgressed into the sleeping space of the homeless – it becomes residual.

Moss Park, as Jacobs would describe it, lacks diversity. It remains largely as a residential area without very many cultural or commercial activities – it is not a destination, but rather more of a thoroughfare except to those who live in the neighbourhood. It carries an identity of fear, danger, and ambiguity very much like what de Sola-Morales described, it is a terrain vague.
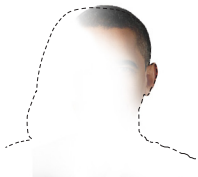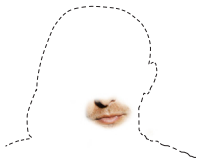
Figure 4.1 (above): The "face" of homelessness as noted by the various reports include a diverse group, not only limited to middle-aged male, image by author

SITUATION

4.1 Understanding Homelessness

This section tries to establish an understanding of homelessness, as a precondition to assist design work. What is homelessness? Who are the homeless? How did they become homeless? Is it by choice? The methods of investigation are through texts, city surveys and reports. The objective here is to get a more accurate understanding of homelessness that is unbiased and not only through our acquired knowledge from our experiences, friends and family, something we've read or saw on TV.

4.2 Defining Homelessness

Homelessness as defined by David Hulchanski, a University of Toronto Professor at the Factor-Iwentash Faculty of Social Work, is simply a problem of inadequacies in housing, income, and social support (Gaetz, 2009). Homelessness is also a complex issue that includes an array of many other issues. The Homeless Hub, a Canadian Homeless Research Network (CHRN) initiative, is a web-based research library and information center for the study of homelessness across Canada. In addition to these definitions, they state that homelessness is an "extreme form of poverty" as a result of social and economic issues producing inadequacies including "affordable housing supply, tenant insecurity, inadequate income, individual crisis, health problems, mental health challenges, addictions, trauma, veterans issues, child abuse and involvement with the justice system" (Gaetz, 2009).

There are three types of homelessness that the Homeless Hub distinguishes: absolute, concealed, and at risk (Gaetz, 2009). Absolute homeless people are those who "sleep rough" on the streets and public spaces or make use of public or private shelters. It is the typical understanding and more visible definition of homelessness. Concealed homelessness describes those who are temporarily staying with friends or family because they are unable to find shelter at the moment. Lastly, at risk people are those who may be losing their house under various circumstances such as the expiry of a lease, release from an institution (prison, mental health centre, etc.) without a place to go.

Figure 4.2 (below): Toronto homelessness facts

Homelessness in Toronto

Estimated overal number of homeless people in Toronto on the evening of April 15, 2009:	**5,086**
Outdoor:	**400**
Shelters:	**3,990**
Violence Against Women (VAW) Shelters:	**185**
Health and Treatment Facilities:	**223**
Correctional Facilities:	**288**

4.3 Homelessness in Toronto

Like any other city in the world, homelessness is an issue in Toronto as demonstrated by several documents by the city. In 2010, there were 22,276 different people who have used shelters, with the most in the first decade of the 21st century in 2001 with 31,175 users (City of Toronto: Shelter, Support & Housing Administration, 2010). From the 2009 *Street Needs Assessment* study, there is an estimated 5,086 homeless people, 400 of whom sleep outdoors (City of Toronto: Shelter, Support & Housing Administration, 2009). The point-in-time methodology does have its limitations however because there are 57 shelter facilities as of May 2011 with 3,800 permanent beds available so based on these statistics where are the other 886 people sleeping if only 400 are estimated to be sleeping outdoors? There are perhaps more people sleeping rough than estimated, keeping in mind that these figures are based on the "absolute" group of homeless people and not the "concealed" or "at risk" group. With an average nightly occupancy rate of only 94% in single and youth shelters, the issue might not be a capacity problem.

A 1998 report, the most recent of its kind, titled *A Profile of the Homeless Population in Toronto* documented the user types of shelter facilities, shedding light on the demographics of the homeless population (Golden, Currie, Greaves, & Latimer, 1999, p. 246). Shelter users are categorized as youth, families, single women, and single men. Between 1988 and 1996, youth and family homelessness approximately doubled in 8 years, accounting for 56% of the 3,136 homeless people in 1996 while the population of homeless single men and women remained relatively constant.The changing characteristic of the homeless demographic is evident and will vary from decade to decade. It also reinforces the fact that most people do not choose to be homeless by choice and certainly not the women and children who make up half of this population.

The 2009 study also identified gender, age, and duration of homelessness according to type of residence: outdoor, shelters, violence against women (VAW) shelters, health and treatment facilities, or corrections. The gender makeup of all but VAW shelters were mostly male, accounting for 80.5% of those outdoors, 70.2% in shelters, 77% in health and treatment, and 91.8% in correctional facilities.

The age of homeless people in these five categories is wide ranging, including people less than 21 years of age to over 65. The majority of people are between 21 and 50 regardless of place of stay. Outstandingly, almost half of the women in VAW shelters were between the ages of 21 and 30.

Figure 4.3 (below): gender distribution of homeless people in Toronto by type of residence

Gender:

Outdoor	80.5%	1.8%	17.7%
Shelters	70.2%	0.9%	28.9%
VAW Sector	100%		
Health and Treatment	77.0%	0.8%	22.2%
Corrections	91.8%		7.7%

■ Male
■ Female
■ Transgender or Transsexual

Age:

	Under 21	21 to 30	31 to 40	41 to 50	51 to 60	61 to 65	Over 65
Outdoor							
Shelters							
VAW Sector							
Health and Treatment							
Corrections							

Legend:
- 0-5%
- 6-10%
- 11-15%
- 16-20%
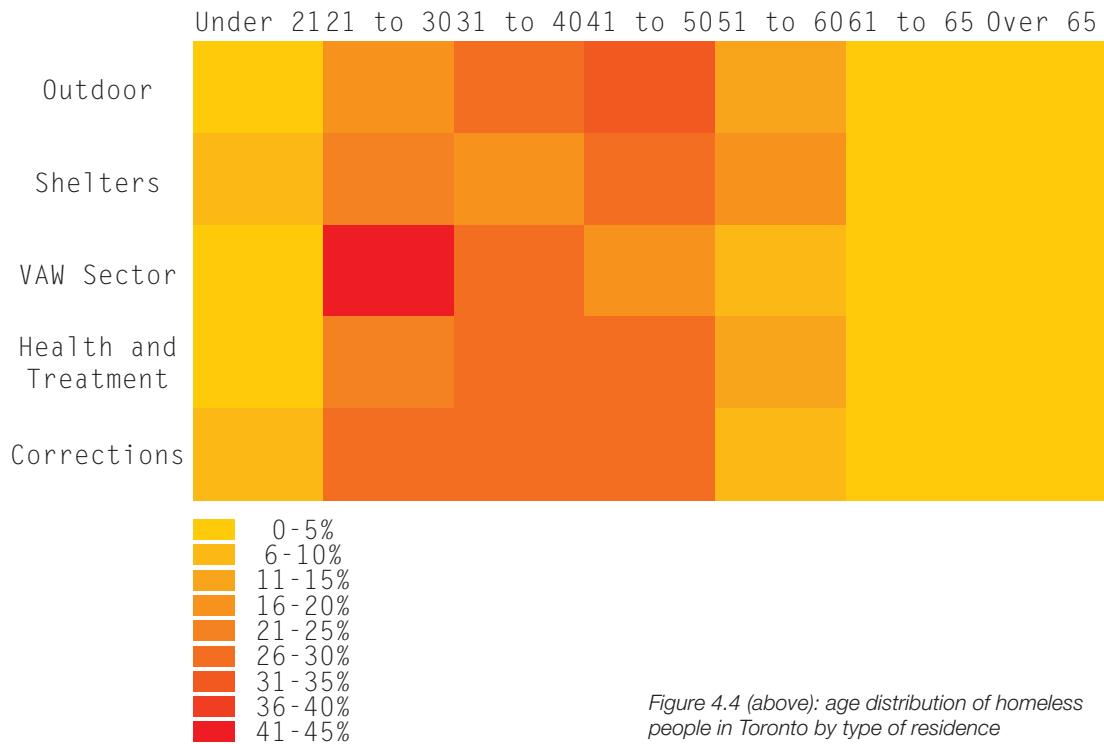- 21-25%
- 26-30%
- 31-35%
- 36-40%
- 41-45%
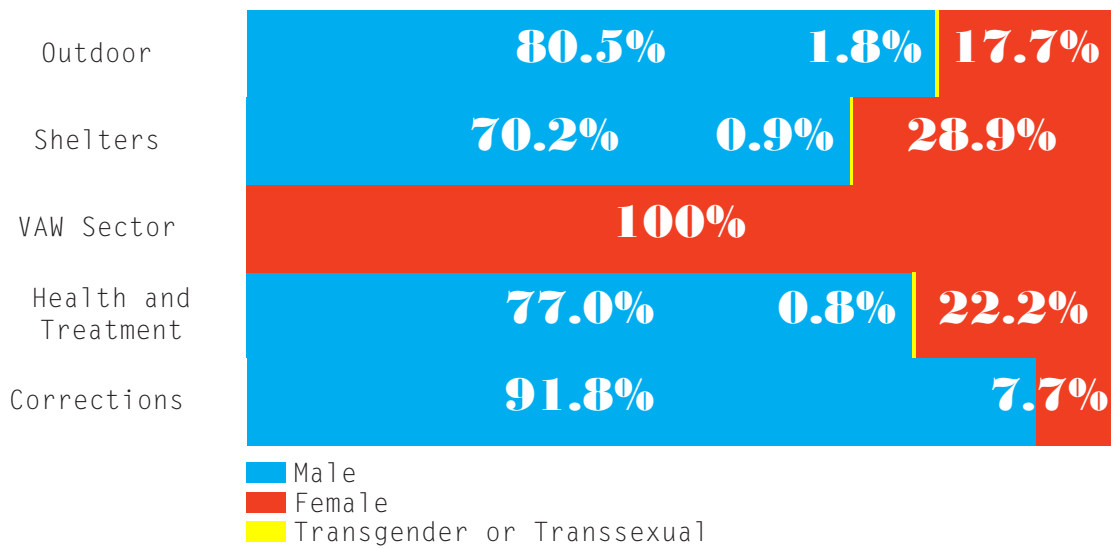
Figure 4.4 (above): age distribution of homeless people in Toronto by type of residence

As diverse as it can be in age, gender, race, and reason for becoming homeless, the length of homelessness also varies. The average duration compiled shows that women in VAW shelters are homeless for as long as 0.4 years or roughly 5 months. The longest duration of being homeless belong to those who live outdoors, averaging 6.1 years.

Our cultural and societal dependence on fixation to an address is what defines us in a census report. There is little known about homeless people however, because of the lack of an address. Many city reports however, try to document homelessness through other means such as what's known as a 'street count'. This 'point in time' method, is inconsistent and without an accepted methodology, where on any given night, professionals and volunteers from the city survey a particular area taking head counts or a 'snap shot' of the population. There are many paths leading to

homelessness. The Homeless Hub indicate the following groups to be more likely in becoming homeless and their respective reasons (Power & Gaetz, 2009):

- Working poor and single-parent families with children: too many expenses
- Women: victims of violence, generally earn less than men
- Newcomers to the rental housing market (young people, immigrants, refugees): placed in situations of rental housing they cannot afford
- Seniors: fixed incomes, increased rents, taxes, decline in physical and mental health
- Visible minorities: racial prejudice and employment disparities
- Aboriginal people: all of above plus ongoing intergenerational trauma , loss of cultural identity, racism
- Lesbian, gay and bisexual: homophobia, not tolerated in many families, schools and communities
- People with disabilities, mental health problems or addictions (most homeless people not mentally ill)

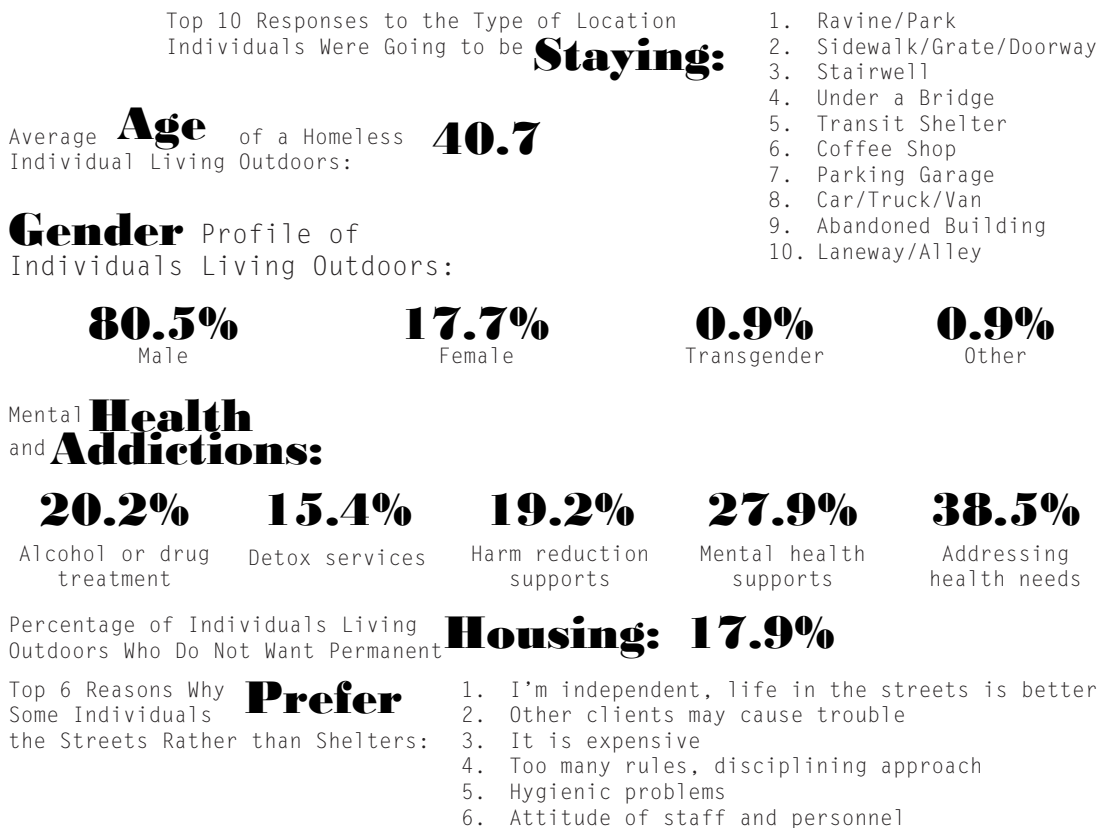## 4.4 Seventeen Point Nine Percent

The diversity amongst homeless people is no different than the diversity found in a city. People from all walks of life end up homeless for many reasons and should not be stigmatized or romanticized through the same lens. What commonalities they share, however, are their struggles with security, housing, hunger, employment, and healthcare. From the findings in these reports it can be said that most people who are homeless would prefer to be sheltered, but for some this preference may not be in the rigid structures of institutionalized environments.

This was reinforced by the 2009 City of Toronto report titled *Street Needs Assessment Results* by the Shelter, Support & Housing Administration (City of Toronto: Shelter, Support & Housing Administration, 2009). The point-in-time survey conducted on the night of April 15, 2009 between the hours of 7:30pm and midnight in which 450 volunteers and 278 team leaders

40

from community agencies walked through 529 study areas in Toronto interviewing homeless people, was carried out to better understand their condition in order to better serve them. The participants comprised of a diverse group of homeless people including those living rough outdoors, in family, youth, mixed adult, men's and women's shelters, VAW sector, in health and treatment facilities, and correctional facilities. One of the questions asked about the desire for permanent housing and almost 9 out of every 10 person answered they would prefer that over the streets. Even 82.1% of those who were living outdoors had this same desire, but what about the other 17.9% (or roughly 72 of the 400 homeless people living on the streets)?

Figure 4.5 (below): characteristics of outdoor homeless people in Toronto

Outdoor Homeless People:

Top 10 Responses to the Type of Location Individuals Were Going to be **Staying:**

1. Ravine/Park
2. Sidewalk/Grate/Doorway
3. Stairwell
4. Under a Bridge
5. Transit Shelter
6. Coffee Shop
7. Parking Garage
8. Car/Truck/Van
9. Abandoned Building
10. Laneway/Alley

Average **Age** of a Homeless Individual Living Outdoors: **40.7**

Gender Profile of Individuals Living Outdoors:

80.5%	**17.7%**	**0.9%**	**0.9%**
Male	Female	Transgender	Other

Mental **Health** and **Addictions:**

20.2%	**15.4%**	**19.2%**	**27.9%**	**38.5%**
Alcohol or drug treatment	Detox services	Harm reduction supports	Mental health supports	Addressing health needs

Percentage of Individuals Living Outdoors Who Do Not Want Permanent **Housing: 17.9%**

Top 6 Reasons Why Some Individuals **Prefer** the Streets Rather than Shelters:

1. I'm independent, life in the streets is better
2. Other clients may cause trouble
3. It is expensive
4. Too many rules, disciplining approach
5. Hygienic problems
6. Attitude of staff and personnel

In Europe, a comprehensive study was completed in November 2005 by the European Federation of National Organizations Working with the Homeless (FEANTSA)'s European Observatory on Homelessness to understand "who" and "why" people depend on emergency-services in Europe (Meert, et al., 2005). Four factors were found to be possible contributors as to why people may still be living rough: capacity problems; decentralization, specialization, and selectivity of services; absence of coordination between services; and the lack of assistance after release from institutions.

Another important aspect of this report focussed on a specific group of individuals, who "reject emergency-services and to spend most of their time in public spaces" (Meert, et al., 2005). Waiting lists due to limited space, disciplinary action, eligibility issues and selectivity are some of the barriers that would have people preferring the streets. The living conditions inside shelters are undesirable to them because of shared space; and limited shelters that cater to families, couples, and people with pets (usually dogs used for protection by people who live on the streets). In their interview with people living outdoors, the top six reasons why they prefer the streets are as follows:

- I'm independent, life in the streets is better
- Other clients may cause trouble
- It is expensive
- Too much rules, too disciplining approach
- Hygienic problems
- Attitude of staff and personnel
- Other reasons

From these reports and studies, we can confidently say that most homeless people including 82.1% of those living rough, do not choose to be homeless and if given the choice, would rather have more permanent forms of living. The remaining 17.9% of the 400 outdoor homeless individuals however, think differently. They have no desire to join other homeless people at shelter facilities nor do they want permanent housing. Perhaps "I'm independent, life in the streets is better" most accurately

captures the psychology behind such preference. This demographic is the minority of the minority. They are the people of Tent City, street dwellers and squatters who have established their own forms of shelter, creating what Gil Doron called the Architecture of Transgression.

This thesis from here on forward will only focus on the needs of the 17.9% because they are the most marginalized in the city. The typical homeless person, if we can use that term here to simplify, have specific types of shelter facilities catered to them such as women's shelters, mental health facilities, etc. The outdoor homeless with preference for permanent housing are currently being addressed as our city begins to adopt new policies towards homelessness such as Housing First and The Foyer model, pioneered in New York City and France, respectively (see section 4.5). These models see homelessness as a housing issue and providing permanent shelter takes precedence over preconditions for admission however, currently there are no accepted forms of responses for the 17.9%.

We as designers should give our utmost attention to housing a group of individuals who have the fewest options, living in the roughest conditions. Few have attempted to help, such as Donald MacDonald's City Sleeper, Michael Rakowitz's parasite, Krzysztof Wodiczko's Homeless Vehicle Project, and Sean Godsell's Park Bench House and Bus Shelter House, later discussed in Chapter 9.

4.5 Current Canadian Homelessness Research
Traditionally, policies in Canada towards homelessness and shelter have been guided by a reformist approach, most often requiring enrollment in self-improvement programs. These preconditions to admission, as highlighted in the European report, are found to be barriers to people who do not wish to be a part of it but would still like to be sheltered or have housing assistance. New Canadian homelessness research presented by The City Institute and the Canadian Homelessness Research Network at York University on January 11, 2013, addresses some of these concerns to housing the homeless. Research presented by Paula Goering, affiliate scientist at the Centre for Addiction & Mental Health (CAMH)'s Department

of Social & Epidemiology Research, and Stephen Gaetz, associate professor at York University's Faculty of Education and founder of The Homeless Hub, shines light on the future of Canadian homelessness policies.

Both research projects recognizes the fact that barrier to housing exists and are going across borders to learn from alternative systems, including New York's Housing First and France's Foyer model. Both researchers recognize the fact that homeless people are frequent users of emergency responses which are very costly. Housing responses on the other hand such as private market, social, or supportive housing can cost as little as $25 daily or per use, while emergency responses range from $69 for emergency shelters to as much as $1,048 for a hospital acute bed (City of Toronto: Shelter, Support & Housing Administration, 2009, p. 33).

4.5.1 "At Home/Chez Soi"

Goering's research is the largest "demonstration project to provide evidence on the application of Housing First as a cost effective intervention for chronic homelessness among people also experiencing mental illness" (Goering, 2013). The Housing First idea provides permanent stable housing and service support, while giving people a choice to the preferred type of housing, where most choose apartments over dormitory style residences. This system, unlike traditional ones, does not require people to demonstrate "readiness", rather, with a vision to "develop self-determination using a client-driven philosophy that emphasize individual choice, harm reduction, and recovery" (Goering, 2013).

The study is currently being tested in five Canadian cities: Monkton, Montreal, Toronto, Winnipeg, and Vancouver, four of which are metropolitan areas while Monkton was chosen simply because it was not, allowing a comparison on the program's effectiveness between the urban and rural context. Under the partnership of landlords, almost 1000 chronically homeless people are now housed under this program.

Initial findings show Housing First as an effective plan to make better use of public money. For every dollar the government invests in Housing First,

$1.54 is saved from other shelter, health and justice services (Goering, 2013).

4.5.2 "Transitions from youth homelessness: What does the Foyer model offer Canada?"

Gaetz's research focuses on youth (under 25 years of age) homelessness, arguing that the Canadian response is not an effective aid or use of money. According to Gaetz, the three key elements of a response are prevention, emergency response, and accommodation & supports, however in Canada, there is too much emphasis on emergency response in the form of shelters, drop-ins, soup kitchens, special programs, and law enforcement. These services are not only costly, but counter-productive to assisting youths.

In transitional housing, youths are allowed to stay for one year, and in some cases up to 18 months. One barrier is that youths have to demonstrate they are ready to get housing and even after being admitted, the 12-18 months of stay is not long enough to prepare them for independence, let alone adulthood.

The Foyer model is what Gaetz would like to adopt in Canada. This model began in France, then adopted in the United Kingdom and now is everywhere around the world including New York, and Australia. The Foyer, like Housing First, has a more lenient intake process where the length of residency can be as long as 6 or 7 years with a focus on work training, education, life skills, and mental health assistance.

DIGNITY IN ARCHITECTURE

5.1 Human Dignity

Dignity, in its simplest form, according to the Oxford Dictionary is, "the state or quality of being worthy of honour or respect". It originated from Middle English based on the Old French word *dignete*, and Latin word *dignitas* and *dignus*, meaning 'worthy' (Dignity, Oxford Dictionaries, 2013).

Human dignity in the context of architecture is given shape, form, and meaning. Such examples are well documented in museum exhibitions, the work of non-profit groups and in literature, including the books titled *Beyond Shelter: Architecture and Human Dignity*; and *Design Like You Give a Damn 1 & 2*. A new permanent exhibition at the International Red Cross and Red Crescent Museum in Geneva, Switzerland explores humanitarian action through architect-designed exhibits titled The Humanitarian Adventure. The exhibits are organized around three themes: Defending Human Dignity by Gringo Cardia from Brazil, Restoring Family Links by Diébédo Francis Kéré from Burkina Faso, and Reducing Natural Risks by Shigeru Ban from Japan. Cardia, defined human dignity as the implied "respect for the life and integrity of individuals. Long protected by texts from all cultures, respect for human dignity calls for constant vigilance: new challenges are continually arising" (Cardia, 2013).

Designs for Dignity, a non-profit organization in Midwestern United States, assisting other non-profit groups in realizing spaces through pro bono design and construction services feels similarly to Cardia. This group

was "founded on the belief that every individual should have access to environments that support the wellness of the human spirit. Design is a transformational force in human life. Our physical surroundings directly impact how we feel, react, aspire, and engage. Spaces of hope, dignity, and comfort are foundations for nurturing the growth and success of every human being" (Designs for Dignity, 2013).

Dignity in architecture therefore is about the quality of space in support of human life; by providing safe and comfortable environments. All architecture adequately addresses safety and comfort but clearly as expressed by the outdoor homeless, this isn't the case (see section 7.4). How can architecture be better designed to accommodate the homeless then? This in turn pushes us to look into more fundamental issues of human needs, specifically Maslow's hierarchy of human needs and Benedikt's adaptation to architecture, to better understand the relationship between the two.

Figure 5.1 (right): Maslow's Hierarchy of Needs

Self-actualization
morality, creativity, spontaneity, problem solving, lack of prejudice, acceptance of facts

Esteem
self-esteem, confidence, achievement, respect of others, respect by others

Love / Belonging
friendship, family, sexual intimacy

Safety
security of: body, employment, resources, morality, the family, health, property

Physiological
breathing, food, water, sex, sleep, homeostasis, excretion

5.2 Maslow's Hierarchy

American psychologist Abraham Harold Maslow published in 1943 his most famous work titled "A Theory of Human Motivation" or better known as Maslow's Hierarchy of Needs in the journal Psychological Review. He observed that humans are motivated simultaneously by different needs, where he groups them into a manageable five: physiological, safety, love, esteem, and self-actualization. These needs are arranged in a hierarchy of pre-potency, meaning that lower-level needs must be satisfied prior to higher-level ones. Maslow also put forward that "man is a perpetually wanting animal. Also no need or drive can be treated as if it were isolated or discrete; every drive is related to the state of satisfaction or dissatisfaction of other drives" (Maslow, 1943, p. 370).

Physiological needs are those that relate to the biological nature of the human body. The body's requirement to be in a homeostasis state – the balance of chemicals within the blood stream, be it salt, sugar, protein, fat, calcium or oxygen content, etc. – influences our behaviour to satisfy those needs. These include breathing, food, water, sleep, excretion and sex.

Safety needs are those that satisfy the feeling of being secure. It may be to protect the human body from danger, or rain and hail, or the security of employment, of resources, possessions, family, and so on.

Love needs can be described as a desire for a sense of belonging, whether to a group, family, or people in general. Affectionate relationships are, as described by Maslow, "not synonymous with sex. Sex may be studied as a purely physiological need" (1943, p. 381).

"All people in our society (with a few pathological exceptions)," Maslow describes, "have a need or desire for a stable, firmly based, (usually) high evaluation of themselves, for self-respect, or self-esteem, and for the esteem of others" (1943, p. 381). Esteem needs are about confidence, acceptance and the respect from other people.

The final need, self-actualization, is the aspiration for self-fulfilment, to realize the full potential of one's capabilities. Examples include an artist

painting, an architect designing buildings, a novelist writing books, and so on.

5.3 Benedikt's Hierarchy

Michael Benedikt, architect and professor of architecture at the University of Texas, presented *Shelter: The 2000 Raoul Wallenberg Lecture* at the University of Michigan Taubman College of Architecture and Urban Planning discussing how Maslow's hierarchy of needs work in architecture. His reading of Maslow modifies the five needs into six, beginning from the lowest need: survival, security, legitimacy, approval, confidence, and freedom.

Architecture undoubtably fulfills the need of survival. It is "the first obligation of all habitable buildings to do these survival-related things," such as being structurally sound, to protect us from "the sun and heat; from wind and cold; from animals and insects; from dust, sand, stones spears and bullets" (Benedikt, 2000, pp. 13-14).

The need to feel secure in our buildings is a desire for control over our physical space in order to protect the people and property inside. Architecture provides security and privacy through the use of windows, walls, doors, locks, gates and so on to limit or give access. More importantly, windows are not only there to provide a beautifully framed view, but also allows us to be connected to the exterior world to have a better sense of orientation.

Architecture is legitimized by way of "announcing social identity, establishing authority, laying claim to property, distinguishing people's memberships of different institutions, manifesting the authority to give people, things, and places names" (Benedikt, 2000, p. 19). More important than a phone number, email or website is a physical address. It implies an established location that can be pinpointed on a map and automatically associates one with a certain community. Discriminatory or not, someone having an address in Beverley Hills, CA may be looked upon differently than someone who lives in Los Angeles' Skid Row. Legitimacy is also achieved in the form of building permits, inspection certificates, or tax records similar

to people having "birth certificates, social security cards, passports, driver's licenses" and passports (Benedikt, 2000, p. 20).

In a democratic world, official validation is not enough. Prior to property owners receiving a building permit, the design must be approved or at least not protested by neighbours. This acceptance is how buildings get approval, similar to Maslow's third need, *love/belonging*.

Esteem, or what Benedikt calls *confidence* can be used to describe buildings in a similar fashion. "Architecture that is confident of its quality… asserts its right to be where it is in the fullness of its presence, significance, materiality, and emptiness, along with nature and other buildings" (Benedikt, 2000). What Benedikt implied was the influence of the built environment on the way we feel and behave, such that its confidence would also rub off onto us in the same way.

Maslow explained *freedom* as a precondition to all basic needs, whereas in Benedikt's reinterpretation, it is the sixth and highest quality architecture has to have. Architecture is an organizational structure – defining and enclosing space, differentiating the outdoors with the indoors using walls, windows, doors, fences and locks – which at first seems to be isolating and oppressive (Benedikt, 2000, p. 26). Benedikt also explains that freedom in architecture rests upon its openness, whether physical or abstract, to support freedom of speech, action, and thought. Secondly, it needs to give users control over that openness – the right to privacy and private property.

5.4 Reinterpretation, Reformulation, and Adaptation
Dignity in architecture – in its simplest dictionary definition or in the humanitarian context – I equate to Maslow and Benedikt's hierarchy of needs. There is nothing more dignifying than life-sustaining actions. Maslow wrote about what the human mind and body needs, while Benedikt elaborated on how those can be achieved through architecture. Following the footsteps of Benedikt, both his and Maslow's hierarchies are fictionally reinterpreted here in the perspective of the homeless. By doing so, it may assist us to better define an appropriate architecture for the 17.9% outdoor

homeless.

The degree of fixity of the hierarchy as described by Maslow is that, "it is not nearly as rigid as me may have implied" (1943, p. 386). There are no two individuals that are the same, hence the order of the hierarchy vary from person to person. Ambition also varies:

> *"In certain people the level of aspiration may be permanently deadened or lowered. That is to say, the less pre-potent goals may simply be lost, and may disappear forever, so that the person who has experienced life at a very low level, i.e., chronic unemployment, may continue to be satisfied for the rest of his life if only he can get enough food" (Maslow, 1943, p. 386).*

Maslow	Benedikt	Quan
Self-actualization	Freedom	Approval
Esteem	Confidence	Legitimacy
Love	Approval	Confidence
Safety	Legitimacy	Security/Privacy
Physiological	Security	Freedom
	Survival	Survival

Survival

Without requiring further explanation, this need remains the most pre-potent because of our physiological needs. It is architecture's first duty to provide shelter in support of survival and the protection of property. Without it, our health is jeopardized; the mind and body ceases to function.

Freedom

Maslow's last need was 'self-actualization' in which Benedikt echoed with 'freedom'. Freedom, whether of politics, choice, speech, or assembly and so on, is one of the highest values in our society. Freedom to the homeless isn't necessarily about mobility – although movement is crucial as a means to survival – but about the fulfillment of civil rights. To be given the right to use the city at their will, without being evicted and personal possession disposed of, is a basic right a city should allow. The desire to remain on the streets is an indicator that freedom, above all other factors aside from

physiological ones, is most important to this group of people.

The level of openness and the ability to control that exclusion is also important to freedom. Benedikt also writes that "it is the right to exclude others from private property – making them less free because it forbids them access – that allows markets to flourish," which implies public spaces should remain accessible to everyone (2000, p. 30).

Although we are mobile during the day – going to work, grocery shopping, restaurants, etc. – we are always attached to our homes, we make the effort to come back to it at the end of the day whether we walk, drive, take public transit, or a taxi – it is a place we call our own, for relaxation and enjoyment. Homeless people on the other hand may not have the means or the strength at the end of the day to come back to a specific location. Architecture that's liberating for the homeless must follow *them*. The freedom to quickly and easily transform any space into a place of retreat, closing up and becoming exclusionary is freedom.

Security/Privacy
The third need in our reinterpretation is security and privacy. There is an obvious lack of security living on the streets, whether it involves theft of personal belongings or eviction by police officers (as a result of state laws, or complaints from businesses and property owners). They are aware and have become toughened to the lack of security. Knowing so, the preference to remain outdoors means that issues of security have already been considered, and it certainly doesn't outweight freedom.

Homeless people lack private spaces, but there is a penchant for privacy as we've seen from earlier examples including impromptu cardboard shelters on streets and under bridges, or the cabins and shacks at Tent City.

Confidence
To have a sense of security, one must be in a space they have confidence in. To gain confidence in a space, the architecture must protect and adapt to climate, users' needs, and site – wherever that may be. The homeless

52

should feel confident that they are capable of deploying and transporting this architecture because residence for the night is at an unknown location. They should feel confident that it is durable, and if needed, parts can be easily repaired or replaced.

Legitimacy

Legitimacy is an issue for homeless people and their form of residence. One who does not have an address cannot get any form of identification, creating a barrier to employment, healthcare, rental housing, banking and so on. Only permanent urban forms in a city are given a physical address, perhaps a virtual address can be given to those living a transient lifestyle.

Unlike some cities in the United States and Vancouver where sleeping in public has been made illegal, Toronto has ruled against this decision in 2011. The City considered amending Chapter 743 "Use of Streets and Sidewalks" of the Municipal Code that would have made "camping, dwelling and lodging in streets" illegal (Welsh, 2011). The decision to eliminate this ban does not make it any more legitimate than it was before, but it becomes easier to implement a design/plan to make better use of city streets for the homeless.

Approval

Certainly no one needs approval from another person to be who they are or do what they want. Benedikt expressed that approval was a sense of acceptance or at the very least a non-objection (2000, p. 21). We can equate this highest level of need to common ground, finding a balance and reducing the tensions between the housed and the homeless, public and private space, residual or well-intended open spaces.

Figure 6.1 (below): Bernard Tschumi (left, as Robin) and Guy Debord (right, as Batman) are portrayed here as superheroes whose architectural concepts/theories have been influential as methodologies for this thesis, image by author

HUMANIZING ARCHITECTURE

6.1 The Situationist International

The Situationist International was a group consisting of artists, painters, film makers, and architects operating between 1957 and 1972. Throughout its formation, a great number of individuals became a part of the group and left for various reasons, but was led mainly by Guy Debord. Gathered from various literatures, the SI had various influences, originating in chronological order from the Lettrist Group, Lettrist International, CoBrA, International Movement for an Imaginist Bauhaus and First World Congress of Free Artists, but their concern remained mutual. That concern was for the quality of life in the new world, one dominated by modernist ideology, efficiency, and capital. They found the new city to be dehumanizing, countering the CIAM-grid, the mechanized world; the separation and simplification of city functions into four categories of work, dwelling, recreation, and traffic; the industrial city; rationality; and a world dominated by capitalism, to the point where it became image which they call the "spectacle". Their strategies of resistance and strongest concepts were the dérive, détournement, and unitary urbanism.

Figure 6.2 (left): "The Naked City", Situationist International, 1957

6.1.1 Dérive

The idea of the dérive came about as a means to carry out their concept of psychogeography, a study to overcome the stoic nature the city has become and "was regarded as a sort of therapy, a fetishization of those parts of the city that could still rescue drifters from the clutches of functionalism, exciting the sense of the body" (Ford, 2005, p. 80). In their regard, "the best urban activity," is one that is "human, unmechanized, and nonalienating" and therefore the dérive was the drift through the city (Sadler, 1999, p. 92). For the situationists, the means by which resistance can be achieved is through individual action: by using it, "walking through the city, reclaiming what was interesting, remapping it, and editing out what it considered uninteresting (mostly the modernist developments)" (Schrijver, 2009, p. 52). Drifting was also about discovery, exploration and in every way is a human activity. Their critique of urban life was the focus on efficiency and rationality rather than comfort, the enjoyment and celebration of life – the social aspects. There was nostalgia for the traditional city that the functional one had replaced, which lacks "unprogrammed space (as a result of the efficient use of space), and therefore a lack of the unexpected" (Schrijver, 2009, p. 42). What the dérive was after was the discovery of these unexpected encounters.

56

Unlike aimlessly walking through the city, it was a means to "re-appropriate urban space and rediscover its qualities…to investigate aspects of the city repressed by functionalism" (Schrijver, 2009, p. 53). The dérive was part chance and part planning, in all case people "were alert to 'the attractions of the terrain and the encounters they find there,' capable as a group of agreeing upon distinct, spontaneous preferences for routes through the city" (Ford, 2005, pp. 77-78). This was expressed through their mapping project of Paris in 1957 titled *The Naked City: Illustration of the Hypothesis of Geographic Turntables*. Areas on the map that interested them were cut out: fragmented, while the rest was left as white space, a commentary on their homogeneity and unimportance. These "unusable" maps also make us aware of the ways we traditionally use a map, going from point A to point B in the most direct route. Here, there are no indications of the path of travel; rather, it is about the path less travelled showing only a direction to their destination. These are represented by the dozens of red arrows that indicate their journey between zones, appearing in an unorganized and irrational fashion, challenging the grid of the city.

Adopting the concept of the dérive to the thesis, drifters are in many ways like the homeless, even if only temporarily. If their claim of three-month long dérives were true, "drifters were effectively vagrants, on the lookout for refuge…the unities of ambiance would have offered places to doss down, like discrete public gardens" (Sadler, 1999, p. 92). The dérive sought out unique social spaces, while moving beyond intent in doing so. In the city, there are social spaces such as public squares, playgrounds, and cafés intended by the designer or architect for the masses. Unintended spaces, such as residual spaces are also social spaces. By challenging the way we use space, also challenges the way we design space. If the dérive is about encounters, discovery, and spontaneity, then the architecture of the dérive would offer choice, free play, and the ability for its inhabitants to alter their environment at will. Architecture cannot be rigid and compartmentalized, offering only one solution, but a chance to offer many solutions to a variety of different users and uses. It liberates users from the intended rigid structures.
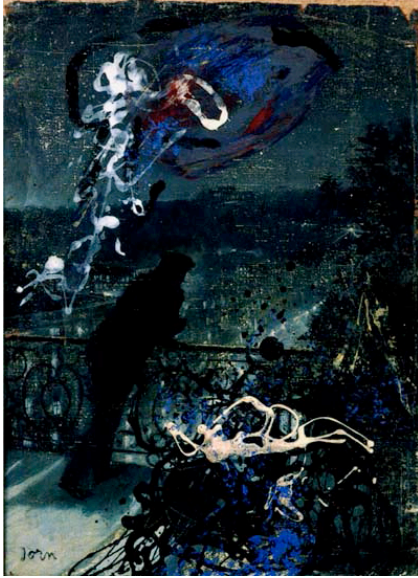
6.1.2 Détournement

Détournement is a technique that can be simply described as juxtaposition, "diversion…hijacking… misappropriation" or hacking, guerilla tactics and sabotaging (Sadler, 1999, p. 17). This technique was "directed at the proliferating imagery in the city, and the potential to transform it into something more meaningful," by using existing things "in a non-conventional way…that they no longer affirm existing conditions, but critique them and contribute to a 'superior' environment" (Schrijver, 2009, pp. 53-55). Its underlying goal was to twist the meaning of something already existing and known such as the collage by Richard Hamilton "Just What Is It That Makes Today's Homes So Different, So Appealing…?", where he sarcastically pieces together found objects or elements of branding to illustrate the impact of consumerism. Another example is Duchamp's "Fountain" of a urinal exhibited as a work of art; it immediately hijacks the original understanding of the pre-existing production. Détourned works by the Situationists were created by Asger Jorn and Guy Debord, notably in the book *Fin de Copenhague (End of Copenhagen)* and paintings from their exhibit *Modifications: Détourned Paintings* in May 1959 (Ford, 2005, pp. 60-67).

Figure 6.3 (opposite, left): "Paris by Night", Asger Jorn, 1959 as part of the Modifications exhibit
Figure 6.4 (opposite, right): "The Avante-Garde Doesn't Give Up", Asger Jorn, 1962 as part of the Modifications exhibit
Figure 6.5 (left): "Just What Is It That Makes Today's Homes So Different, So Appealing...?", Richard Hamilton, 1956

Public space is evidently détourned when homeless people occupy parks, sidewalks, and alleyways, altering their original intentions of usage. The context of 'home' is détourned from one's house to streets and parks, both of which are understood to be circulation arteries and a place of leisure. Their situation can be understood as a last resort for survival or alternatively, as a protest for change. It highlights the contrast between two social groups and presents a differing view on home and shelter. When traditional institutionalization efforts fail to accommodate the outdoor homeless group, other attention should turn to alternative solutions aimed at improving the living conditions of homeless people. Détournement offers us a tactic which can be explicity expressed in design - an instrument not only capable of providing shelter, but also meaning in a provocative way.

6.1.3 Unitary Urbanism

Individual action is the concept behind all Situationist strategies. Even at the scale of the city, unitary urbanism, is no different. Drifting through the city, situationists became the mice in a maze, where they "so far had had to treat the city as a found object" (Sadler, 1999, p. 117). Unitary urbanism tried to liberate its inhabitants through participation. The Situationist City would not be driven by imposed and abstracted systems but by its citizens, engaged in the activity of 'constructing situations'. Inhabitants would construct their own environments and be free to drift where they wished without the abstracted notion of streets and grids. This freedom empowered the individual and enriched everyday life.

The functional approach to architecture and the city was rejected for a more unitized way of living. This meant blurring the lines between work and play but also being able to meet functional needs. This new society they proposed supported their quest for continual exploration and leisure.

This social project considers lands that "were regarded as ruins of a mislaid and superior social space, urban fragments seemingly bypassed by spectacular urbanism and awaiting unification" (Sadler, 1999, p. 119). To Debord, it "must include the creation of new forms and the détournement of previous forms of architecture, urbanism…" as a way to "recover the lost, mythic wholeness that had been shattered by capital and bureaucracy" (Sadler, 1999, pp. 119-120).

"Unitary urbanism rejected the idealistic quest for fixed forms and permanent solutions that had been the basis of traditional town planning. Since situationism regarded art as a playful means of social organization, unitary urbanism would naturally envisage 'the urban environment as the terrain of a game in which one participates'" (Sadler, 1999, p. 120).

Appropriating U.U. to architecture for the homeless, buildings too cannot be fixed forms with permanent solutions, understanding that homelessness is a complex problem that is temporal and transitional. Institutionalized homeless shelters are one solution for those who choose to use them, then there are those who don't, people who prefer to live in alleyways, sidewalks

and park benches. To enrich the lives of this group, we cannot abolish their lifestyle but instead should embrace it and work towards another type of solution. One night on the park bench may be taken by someone else on the next night; the homeless drifter is on an endless search for space. If the non-homeless have fixed shelter, then perhaps the shelter of the homeless needs to be mobile, adaptable, and portable to better suit their lifestyle.

In order to avoid becoming ideologists, Situationists saw themselves as catalysts to influence urban development but never controlling or imposing. "The creation of the situationist city would pass from its avant-garde city fathers to its citizens," thus only providing a framework to begin the project then letting go allowing its inhabitants to construct their own environments. As expressed by Kotányi and Vaneigem, both members of the SI, unitary urbanism is "a living critique, fuelled by all the tensions of daily life….Living critique means the setting up of bases for an experimental life….Such bases cannot be reservations for "leisure" activities from society…" (Sadler, 1999, p. 121).

6.2 Hedonistic Architecture Precedents

Three projects, at various scales, demonstrate the architectural approach and attitude that the Situationist International was striving for. They include the city-scale megastructure, *New Babylon*, by Constant of the SI; *StreetCity* shelter in Toronto by the Homes First Society; and architect Donald MacDonald's personal-sized shelter, *City Sleeper*. They present new strategies in architectural organization and radically rethink the user-architect relationship. Additionally, it is also in these building strategies that demonstrate situationist ideas of the dérive, détournement, and unitary urbanism.

61
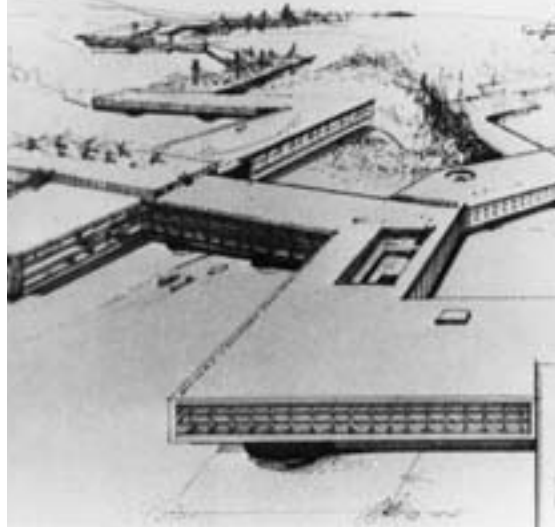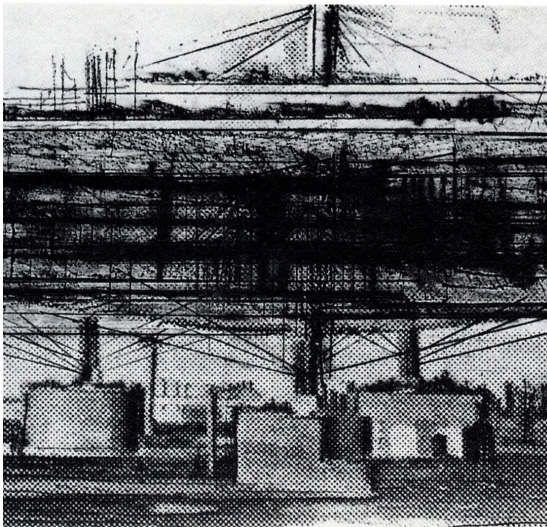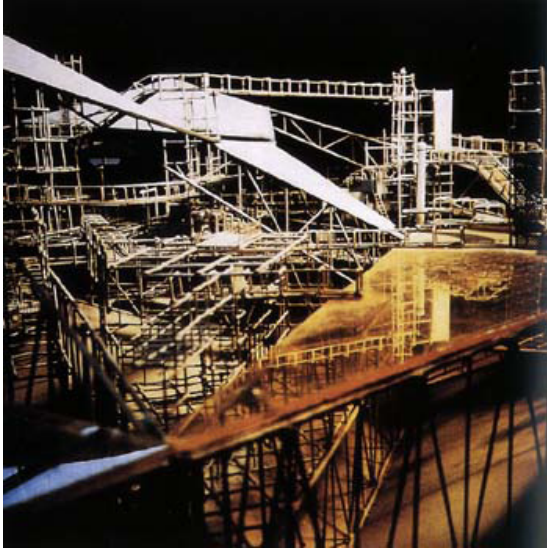
Figure 6.6 (top, left): architectural model
Figure 6.7 (top, right): massing model
Figure 6.8 (above, left): sectional drawing
Figure 6.9 (above, right): aerial perspective drawing

62

New Babylon

New Babylon was the SI's only architectural project, first conceived of in 1956 by Constant Nieuwenhuys. The name, as described by Lefebvre, comes from the "Protestant tradition" where "Babylon is a figure of evil. New Babylon was to be the figure of good that took the name of the cursed city and transformed itself into the city of the future" (Ross, 1997). It was an architectural manifestation of situationist thought against functionalist regimes, in the form of a post-revolutionary utopian city.

As best described in the book *The Situationist International: A User's Guide* architecture would no longer be the "concrete manifestation of a controlling social order, the city would consist of a series of zones to move through rather than distinct places for permanent occupation" (Ford, 2005, p. 74). These distinct places are the four in which the Athens Charter had imposed on the modern city – the segregation of working, dwelling, recreation and traffic. New Babylon tried to dissolve this social order by creating a radically new one.

In support of a more playful society, the transformable structure the size of a small city is elevated above the ground supported by columns, freeing the ground for continuous drifts and free play. By creating another plane above the ground, the new society literally leaves behind the bourgeois metropolis (Goldhagen, 2006). Its inhabitants would be freed from the "shackles of work, family life, and civic responsibility," roaming freely in search of new sensations, encounters, and engaged in transforming their own environment (Goldhagen, 2006).

Constant's hedonistic vision prioritized individual desires over anything else as the basis for the new society. The ability to configure and reconfigure one's environment is empowering. Their decentralized formation of space avoids hierarchy and repetition, allowing an infinite number of possible unique encounters. The traditional social and architectural order is challenged and détourned, architecture is no longer a finite solution but a stage for ongoing productions in support of self-fulfillment and self-satisfaction.
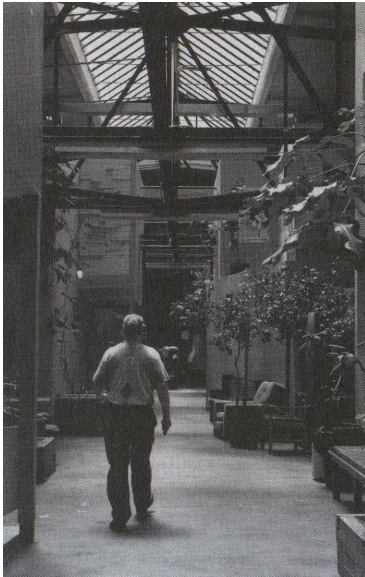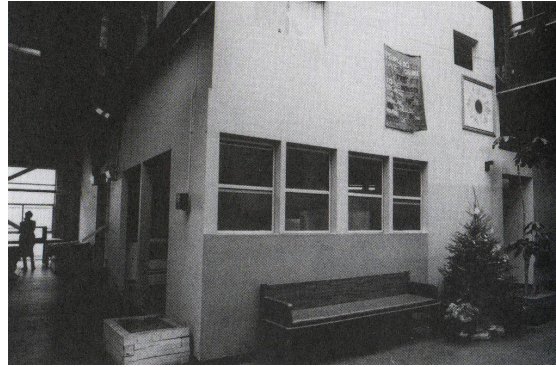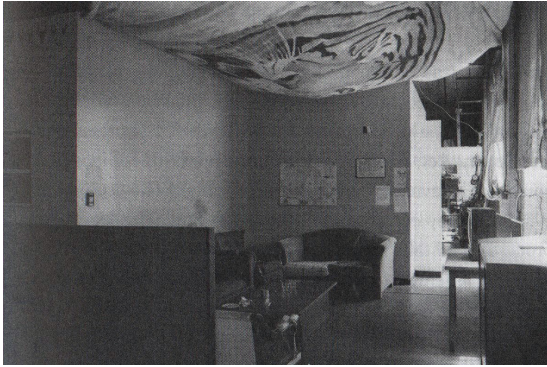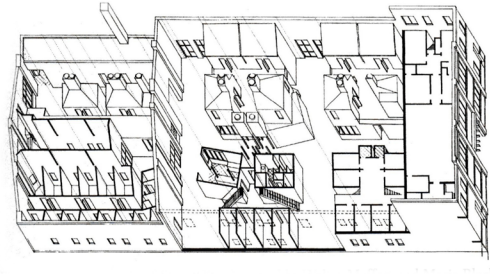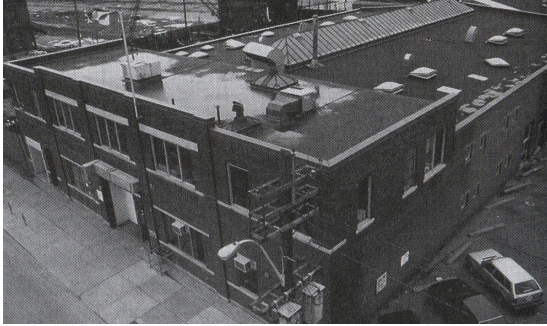
Figure 6.10 (top, left): aerial photo
Figure 6.11 (top, right): axonometric drawing of ground floor
Figure 6.12 (above, left): interior lounge
Figure 6.13 (above, right): interior corridor
Figure 6.14 (left): "Main Street" interior corridor

StreetCity

StreetCity was a radically different alternative to housing for the chronically homeless single men and women of Toronto, operating between December 1989 and November 2003. The idea was generated by a group of homeless and formerly homeless men and hostel workers known as The Balcony Bunch, who were evicted from the hostel at All Saints Church when the property was bought and transformed into permanent housing at the intersection of Dundas and Sherbourne Street.

Without any credibility or permanent residence, government funding was handed over to the Homes First Society to manage and carry out the project instead of The Balcony Bunch (Bridgman, 2006, p. 106). Everything about StreetCity was different from traditional hostels or shelters from its concept to governance, as well as architecture. It was a mixed gender facility where residents were allowed to stay or go at any time they wanted, with no restrictions on alcohol, drug use or curfew. The building transformed a 24,000 square-foot warehouse that used to be a vehicles maintenance garage for Canada Post.

What's unique about the building was its 'Main Street', a name given by its residents, which was a sky-lit corridor running through the middle of the building. Lined with "climbing vines, benjamina, broad-leafed tropical trees" and furniture, it served as a lounge, social gathering space, communal dining hall, meeting space, and at times a temporary sleeping area for some. Within this larger shell were six "houses" with two rooms each at the front while the back of the building had single storey houses flanking "Main Street." The metaphor was amplified by the actual use of roofs, porches and balconies in their design while also incorporating kitchens, washrooms, and lounge areas within each 'house'.
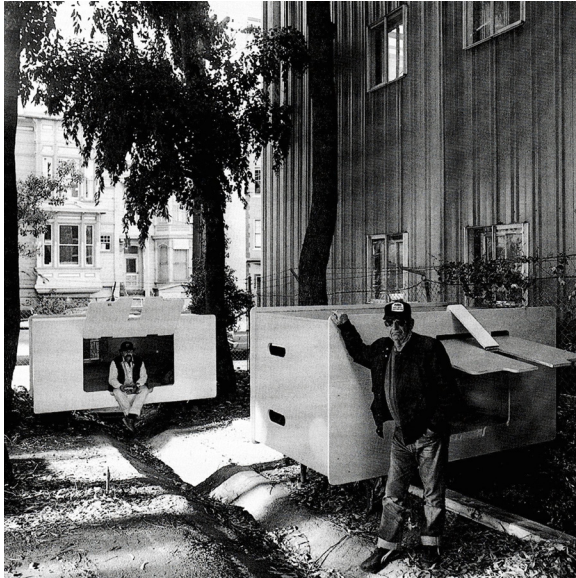
Figure 6.15 (top): photo of City Sleeper in use by two homeless individuals
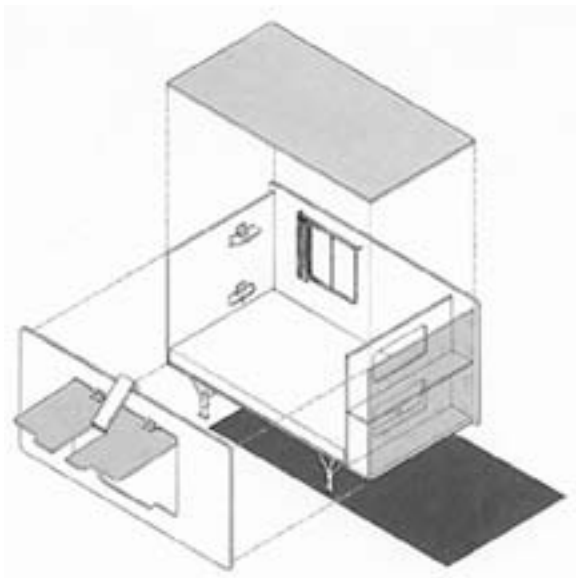
Figure 6.16 (above): exploded axonometric drawing of City Sleeper

City Sleeper

By "taking a non-judgmental, non-reformist attitude towards solving some of the concerns of the homeless," this next project can be said to have been done in the spirit of the Situationists which emphasized individuality (MacDonald, 1987). City Sleeper was a 1987 project by San Francisco architect Donald MacDonald for two homeless individuals he'd noticed sleeping in the parking lot next to his office. The 4-by-8 foot shelter measuring 4 feet high was constructed of plywood supported on car jacks standing 18 inches above the ground. It is waterproofed to keep out the elements and also has a glass sliding window with insect screen and vents for air circulation. Also included are a 4 inch thick mattress, shelf, and clothing storage. Total construction cost in 1987 was less than $800 USD ($480 for materials, $300 for labour) (New York Times, 1987).

Having established a non-profit company, City Sleepers Inc., MacDonald was determined to build 500 shelters to be implemented throughout San Francisco. Sites as possible areas of occupancy and authorities inquired included spaces under freeways owned by Caltrans, the San Francisco Redevelopment Agency and 'any individuals that care to offer their lots' (New York Times, 1987). It was difficult to convince the city however, because some saw them as dog houses, which lacked "running water, toilet facilities…and meets no codes" as expressed by a mayoral spokesman (New York Times, 1987).

Some may see these solutions as dog houses or dehumanizing, because it is out of the norm, they are uncomforted by a different kind of 'architecture'. To MacDonald however, it is a small intervention that may have larger effects. "People say that it's inhumane to have these people sleeping in boxes, but isn't that more humane than having them sleep on the ground or in the rain? Bureaucrats make things more complicated, more expensive than they need be" (People Magazine, 1987).

Figure 7.1 (top): bird's-eye view of park
Figure 7.2 (centre): aerial photo
Figure 7.3 (above): view along canal

DECONSTRUCTING TRADITION

7.1 Bernard Tschumi

Bernard Tschumi's essay "Abstract Mediation & Strategy" was about finding an alternative approach to architecture, away from the traditional rules of composition, hierarchy, and order (Tschumi, 1996, pp. 191-206). The Parc de la Villette project was his testing ground for these theories. Knowing that the competition was to find a chief architect in charge of master planning and designing the key elements, and that program, budgets, and priorities would change over the course of a century, a strong conceptual framework was thought to be crucial to the success of the project. External forces such as the contributions by other artists, landscape designers, and architects would alter or undermine the composition of the chief architect. The project then, cannot be a composition but rather an "organizing structure that could exist independent of use, a structure without center or hierarchy, a structure that would negate the simplistic assumption of a causal relationship between a program and the resulting architecture" (Tschumi, 1996, p. 193). The deconstruction of a conventional building is represented by thirty-five follies organized in grid formation, equally spaced apart throughout the park. Similar in size, height, and scope, the follies lack hierarchy as well as the "causal relationship between a program and the resulting architecture" because there was no predefined program. Follies were loosely defined structures, a mainframe if you will, where program would change or be defined by users at different times. Without order, the ground plane of the park became more defined by human activity than landscape or building design. Park visitors had a choice of where to
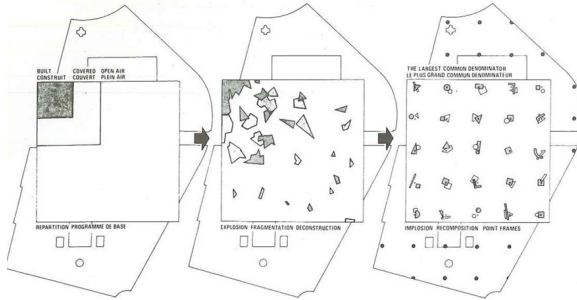
Figure 7.4 (left): concept diagram of program fragmentation and redistribution in grid formation throughout the grounds of the park
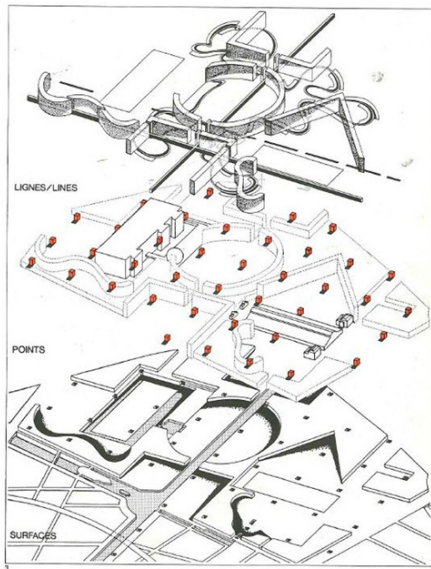
Figure 7.5 (left): diagram illustrating superimposition of points, lines, and surfaces

go and which follie to visit first, recalling the Situationist's Naked City and Constant's hedonistic goals.

The first strategy was superimposition. The layering of the point grid, lines, and surfaces onto the site, where program would be situated at its interstices, had several intentions. First, the grid was infinite, it opposed boundary and closure. Secondly, it opposes hierarchy because there is no center; it is decentralized like Smithson's mat building and Constant's New Babylon. And lastly, the layering and distribution of program created a multiplicity – which Tschumi called 'the principle of heterogeneity' – "is aimed at disrupting the smooth coherence and reassuring stability of composition, promoting instability and programmatic madness."

The second strategy aims to create an understanding of multiplicity. Cinegram in the form of a montage is about discontinuity, where fragmented parts could be understood independently but also as part of the whole. Composition is read as a plan but La Villette should be understood as a whole made up of constituent parts.

An unconventional architectural project demands unconventional strategies. Deconstruction challenges ideology by going against "cause-and-effect relationships, whether between form and function, structure and economics, or (of course) form and program, replacing those oppositions by new concepts of contiguity and superimposition" (Tschumi, 1996, pp. 198-199).

Non-sense/No-meaning aims to unsettle the inscription of meaning on architectural form. Meaning in the La Villette is constantly being produced and always changing, nothing is finite, time is not frozen. To refute meaning is to refute memory and context, which Tschumi states is about "an architecture that means nothing…in a Nietzschean manner, La Villette moves toward interpretive infinity, for the effect of refusing fixity is not insignificance but semantic plurality" (Tschumi, 1996, p. 203).

The last strategy was Program and Distanciation. The continued production of events and functions at La Villette is one that is temporary;

the architecture therefore should not be attached to any one of them. This strategy liberates architectural identity from its programmatic function. Distanciation can be achieved through three tactics: crossprogramming, transprogramming and disprogramming. Analogous to crossprogramming is cross-dressing; where a space is given a program it was not intended for. A Church building is used for a rock concert or office buildings as prisons – their original meaning becomes détourned. Transprogramming involves combining two incompatible programs that would normally not be seen together under one roof. Examples include combing a library building with a roller-coaster, hotel and aquarium, or airport with shopping mall. Disprogramming is about contamination, where two or more programs are combined and blended together. The spatial configuration of program A is combined and influenced by program B's spatial configuration. The result would be a result that's uncommonly seen.

ARCHITECTURE OF THE STREETS

8.1 Places of Survival: Sidewalks and Open Public Space

> *"Most of us take sidewalks for granted. An undervalued element of the urban form, this public ground connects points of origin and destination, and few people go through the day without traversing at least one sidewalk. Sidewalks are unassuming, standardized pieces of gray concrete that are placed between roadways and building, and their common appearance belies their significance and history as unique but integral parts of the street and urban life. A commercial terrain for merchants and vendors, a place of leisure for flaneurs, a refuge for homeless residents, a place for day-to-day survival for panhandlers, a space for debate and protest for political activists, an urban forest for environmentalists: U.S. sidewalks have hosted a wealth of social, economic, and political uses and have been integral to a contested democracy." (Loukaitou-Sideris & Ehrenfeucht, 2009, p. 3)*

Loukaitou-Sideris and Ehrenfeucht couldn't have said it any better when they described the wide-ranging roles of our streets and sidewalks. Several decades earlier, Jane Jacobs expressed her appreciation for the streets as a space of social interaction and leisure, in which its diversity of users generated throughout the day kept neighbourhoods safe – what she called

"eyes upon the streets" (Jacobs, 2011). It was also around this time in Paris that the aforementioned Situationists developed their concept of the dérive, relying on the nature of streets and sidewalks to generate their unexpected encounters and discoveries.

The public realm – including parks, sidewalks, and squares – however, is not as public as it seems. Needless to say, what is public will be inclusive of many different activities which, at times, can be conflicting. For example, street vendors who take advantage of sidewalks as economic spaces directly compete with shop owners when similar goods are sold (Loukaitou-Sideris & Ehrenfeucht, 2009, p. 125).

8.2 Publicness and Contestation

There is much debate about what is acceptable activity in public spaces today, changing from an impersonal democratic arena to exclusionary practices that favour only those with power. Sidewalks, like park spaces, also become contested territory when some groups find the activities or presence of others interfering with their own comfort level or understanding of intended uses.

If 'Haussmann-ization' is the inconspicuous method that "deliberately engineered the removal of much of the working class and other unruly elements from the city centre…using powers of expropriation in the name of civic improvement and renovation," then the anti-homelessness policies that Neil Smith, Don Mitchell, Loukaitou-Sideris and Ehrenfeucht wrote about is the more explicit approach (Harvey, 2008, p. 33) (Smith, 1996) (Mitchell, 1997) (Loukaitou-Sideris & Ehrenfeucht, 2009). Loukaitou-Sideris and Ehrenfeucht have demonstrated how cities in the 1980's and 1990's have used laws to remove "local disorder" in anticipation for city centre redevelopment (Loukaitou-Sideris & Ehrenfeucht, 2009, p. 161) evident in Toronto's condominium boom and gentrification projects such as Regent Park and the West Don Lands. Cities adopted ordinances to restrict and exclude certain activities such as aggressive panhandling "within ten feet of a bank entrance or an ATM machine, and near people as they left their cars…loitering, camping, or sleeping in public…requiring beggars to obtain and carry licenses…sit or lay on sidewalks from 7 a.m. to

9 p.m., and so on" (Loukaitou-Sideris & Ehrenfeucht, 2009, pp. 161-167).

Similarly, in the Canadian context, Vancouver's new bylaw bans people from sleeping on streets, in parks or other city properties (Canadian Broadcast Corporation (CBC), 2012). Currently, the Pivot Legal Society is filing a lawsuit on behalf of a formerly homeless man to challenge what they call "unconstitutional".

In the book titled *Whose Public Space?: International Case Studies in Urban Design and Development*, editor Ali Madanipour (and author of the final article of the same title as the book) argues that these competing claims over public space should be evaluated based on the "principle of equality" (Madanipour, 2010, p. 242). In other words, the legitimacy of each group's claims, however justifiable, should be evaluated and dismissed when its impact on others is exclusionary. What is public should be accessible to everyone regardless of "physical abilities, age, gender, ethnicity, income level and social status" (Madanipour, 2010, p. 242).

8.3 Sidewalk as Site

Streets not only are spaces of transport, travel and leisure but also a space of survival to some. Homeless people rely on exhaust grates for warmth, pedestrians for security, and recessed storefronts for shelter. Our attraction to the diversity, hustle and bustle of city streets and open public spaces are the same qualities homeless people look for because it fosters the interaction with others. Panhandlers, like business owners, for example, would prefer to be situated in areas with high pedestrian traffic flows, not in a park, ravine or on a vacant lot at the edge of cities.

In their book Sidewalks: Conflict and Negotiation over Public Space, Loukaitou-Sideris and Ehrenfeucht argue that public space should be made available to those who do not have private space and "…the fact that these residents are engaging in life-sustaining activities should ensure that their interests take precedent" (Loukaitou-Sideris & Ehrenfeucht, 2009, pp. 157, 187). They argue that sidewalk conflict and claims are often misrepresented for acts of danger and harm, when in fact it is discomfort that causes homelessness incompatibilities. Issues with discomfort are

subjective and can be difficult to identify, it is also not illegal to cause discomfort yet anti-homeless laws go against ordinary activities such as "spending time in public space, resting, talking, asking for money, sitting on a bench, or sitting on a sidewalk" (Loukaitou-Sideris & Ehrenfeucht, 2009, p. 175). The legitimacy of causing discomfort as a claim is far from being a justifiable reason to have someone removed from sidewalks and public space. Witnessing suffering "can and should cause dismay" according to Margaret Kohn (Kohn, 2004, p. 172). The presence of homeless people on the streets plays two other roles: educating urbanites on the condition of homelessness and to allow those who are homeless a "better position to demand what they need" (Kohn, 2004, pp. 167-188) (Loukaitou-Sideris & Ehrenfeucht, 2009, p. 187).

Our first priority then should be to respect the individual freedom of those who are homeless with respect to their choice of residence. It was implied in the Situationists' New Babylon, Homes First Society's StreetCity, and Donald MacDonald's City Sleeper that non-reformist approaches are required to humanizing architecture. Architecture for the outdoor homeless demographic then, should remain on the streets.

Architecture for this group need not be a large container with four walls, and perhaps it requires us to rethink and adopt a phrase from Loukaitou-Sideris and Ehrenfeucht, aimed at re-introducing "the possibility that public space can be used for survival – not as a place of last resort but as a step on a longer and varied journey" (Loukaitou-Sideris & Ehrenfeucht, 2009, p. 187).

8.4 Street Furniture as Shelter
Whereas architect Donald MacDonald made use of public and residual spaces as locations for his homeless shelter (City Sleeper), Melbourne architect Sean Godsell did so by exploiting the multifunctional aspect of street furniture in two of his projects, Park Bench House and Bus Shelter House.

Figure 8.1 (above): operating sequence of Park Bench House, Sean Godsell Architects
Figure 8.2 (left): before-after photo of Bus Shelter House, Sean Godsell Architects

"A humane city can provide its homeless with the most rudimentary shelter by building it into the city's infrastructure – park benches, bus shelters, tram stops and so on and indeed a measure of the sophistication of a society is in how well it treats its underprivileged." (Sean Godsell Architects, 2002)

However small in scale and minimal in scope these structures are, they demonstrate a compassionate initiative to accommodate the homeless by providing alternative choices. Godsell argues that people who are homeless rely on the city - not houses – as "a place of sustenance and support" where its infrastructure design should be accepting instead of displacing (Sean Godsell Architects, 2003-2004).

The Park Bench House, as its name clearly states, is a coupling of seating and shelter. A park bench by day, the double platform can simply be erected into a shelter at night.

The Bus Shelter House similarly combines public transport stations with overnight shelter. Additionally, advertising billboards are modified to dispense blankets, food, and water.

8.5 Ephemerality of Homelessness

Homelessness can be characterized by its ephemeral condition. These short-lived experiences hold true through various aspects of being homeless including its indefinite duration, availability of food and water, spatial displacement, and obtainability of cash through panhandling, squeegeeing and/or other informal services. Nothing is for certain nor are there any guarantees, but more importantly, it may not be important to the 17.9%. The penchant to live independent of city-provided facilities and services including permanent housing requires one to be on a continuous dérive, not as a means to seek new encounters, but for survival. The following section explores the sociocultural and architectural morphology of pre-urban vernacular architecture, to shed light on how nomadic societies have coped with the issue of shelter.

In *6000 Years of Housing, Volume 1: The Pre-Urban House*, Norbert Schoenauer, author and architecture professor at McGill University, explores pre-urban indigenous housing as a response to cultural and physical forces (Schoenauer, 1981). Pre-urban settlements can be classified under six phases in the order of most to least nomadic: ephemeral or transient; episodical or irregular temporary; periodic or regular temporary; seasonal; semi-permanent; and permanent dwellings. Each of these six types are characterized by unique social, economic, and political structures, intrinsic to and a direct influence on their architecture.

Ephemeral or Transient Dwellings

This first phase of housing development belongs to inhabitants who are "primitive food gatherers and lowly hunters, constantly on the move in an endless pursuit of food" (Schoenauer, 1981, p. 2). The social structure is loosely defined and self-regulated in the small group (bands) they travel with, where sometimes a skilled hunter will take the leadership role. Agriculture, not having been invented yet, has this group relying solely on what nature provides. The duration of stay at any given location depended on the availability of food within walking distance. When supply was exhausted, shelters were simply abandoned, with each use lasting no longer than a few days. This meant that structures had to be easily and quickly erected from resources available at the location they chose to

Indigenous Dwelling Types

Ephemeral or transient Dwellings		Several days
Episodical or irregular temporary Dwellings		Several weeks
Periodic or regular temporary Dwellings		Less than several months
Seasonal Dwellings		Several months
Semipermanent Dwellings		More than several months
Permanent Dwellings Units		Permanent

Figure 8.3 (above): categorization of indigenous dwelling types based on length of stay

temporarily settle. Branches were vertically driven into the earth in a circular plan, which created the main structure of the dome-shaped dwellings, reinforced by the lacing of smaller branches. The skin of the structure was a combination of grasses, leaves, reeds or whatever was available overlaid on top of the branches.

Episodical or Irregular Temporary Dwellings

Similar to ephemeral dwellings, episodical or irregular temporary dwellings are used by a similar group of food gatherer and hunters, but at a more advanced level. They consist more of the qualities of skilled hunters or fisherman than gatherers. That being said, this group had the ability to stay at the same location for longer durations, extending to as long as several weeks. The advancement of this society affords them to build larger, taller and more complex shelters. Interior spaces were now differentiated by

79

function: sleeping, cooking, and a place for fires. Climate was controlled by the use of camp fires, and the adoption of two different types of dwelling – one for the summer and another for use in the winter. Some building materials were reused and transported with wherever they went, implying a higher use value in the things they brought along. Most often, these were materials that cannot be easily found or made, such as seal skin or buffalo hide which replaced leaves as the skin of the structure.

These first two phases of pre-urban housing is most relevant because they share many qualities with today's 17.9%. First is the nature of being nomadic, often times people do not have a choice to the same space because it may be taken by another person or they have drifted to some other part of the city and walking back takes too long or too much effort. Shelter (or lack of) is wherever one might find him or herself at night.

Secondly, the homeless or anyone living in the city today for that matter, are food gatherers. We do not cultivate our own fruits, vegetables or livestock; we "gather" them from the local butcher and grocery store. Our choice of diet does not allow us to feed off of plants and flowers found in the urban environment either.

Third is the need for shelter. Nomadic societies had rudimentary shelters that met their needs in cold or warm climates. Rudimentary shelter in our society is shunned and displaced, in a system where the mainstream solution is the only solution. There are no resources in the city to build oneself a shelter, nor does everyone have the skill and tools to properly do so. Examples of self-made shelters take the form of cardboard boxes, tarp covers, or in the rare instance shacks such as those at Tent City.

CASE STUDIES

Designing for the 17.9% requires looking at a range of solutions because of the complexity of the group, with differentiating views among individuals. Upon looking at a selection of case study projects that may be suitable, a range of scales were chosen based on two criteria: portability/mobility and comfort. Setting the scale and complexity parameter no larger than a trailer home, and a teepee on the other end of the spectrum, four projects were chosen for study and comparison: paraSITE, Refuge Wear and Body Architecture, Homeless Vehicle Project, and Furtive.

9.1 paraSITE

Michael Rakowtiz, an American conceptual artist and professor at Northwestern University's faculty of Art Theory and Practice, first designed this ongoing project series in 1998. Using only $5.00, plastic bags and tape were used to create temporary homeless shelters that exploited the exterior ventilation system of buildings. It is symbolic of the survival strategies used by the homeless, thereby amplifying the contrast between the housed and un-housed (Rakowitz, 2006, p. 190).

Rakowitz writes, "While these shelters were being used, they functioned not only as a temporary place of retreat, but also as a station of dissent and empowerment; many of the homeless users regarded their shelters as a protest device. The shelters communicated a refusal to surrender, and made their situation more visible" (Rakowitz, 2006, p. 190).

Figure 9.1 (left): images of different variations of paraSITE in use, Michael Rakowitz

9.2 Refuge Wear and Body Architecture

Designed in 1992 and 1996, respectively, by Studio Orta, a Paris-based duo consisting of Lucy and Jorge Orta, Refuge Wear was geared towards the homeless or adventurous nature lover. Wearing tent-like sci-fi body suits with minimum personal comfort and mobility makes one more aware of the problems of survival in life-threatening conditions. While Refuge Wear concerns the individual, Body Architecture shifted to the collective in which several tent-like structures were combined, creating what they called the "Social Link".

Figure 9.2 (below): images of different variations of Refuge Wear and Body Architecture, Studio Orta

82

9.3 Homeless Vehicle Project

Artist and professor in residence of Art, Design and the Public Domain at Harvard University Graduate School of Design, Krzysztof Wodiczko, created the Homeless Vehicle Project in 1988. Similar to Rakowitz's parasitism, Wodiczko used the term "scavenger," for his project created for four specific individuals in New York City who collects, sorts and returns cans to supermarkets as a form of employment (2006, p. 194).

Figure 9.3 (below): images of Homeless Vehicle Project, Krzysztof Wodiczko
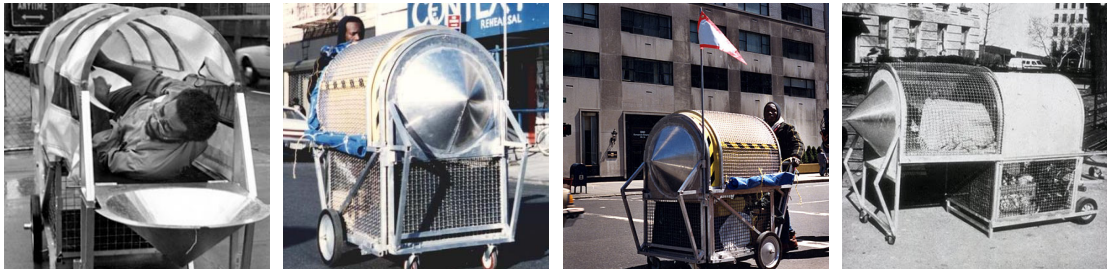
9.4 Furtive

Furtive, meaning stealth, was created by French architect, Francois Roche of R&Sie(n) architects. The reflective surface of the living unit mirrors its surrounding context yet distorting it at the same time, simultaneously blending in and producing a virtual reality. The living unit is large enough for one individual complete with living space, shower, and storage. It exploits street lamps as a light source at night as well as the water supply and sewage lines in the streets of Paris.
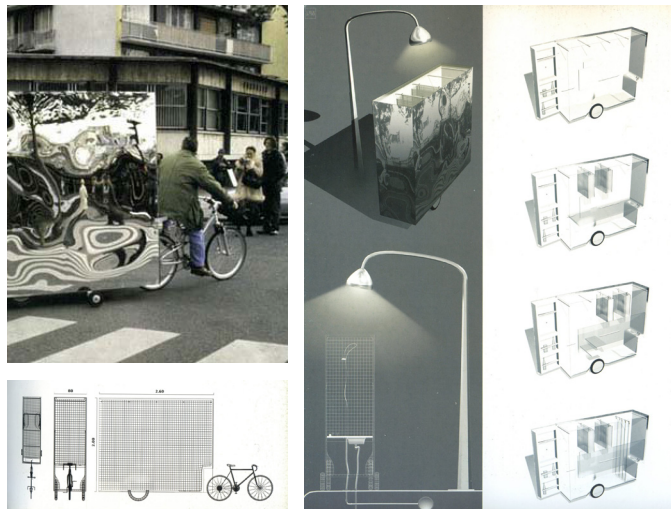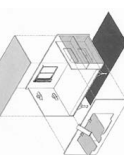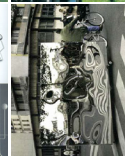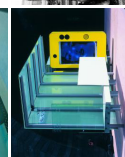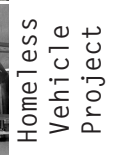
Figure 9.4 (right): images of Furtive, Francois Roche

Less Mobile
Higher Comfort

More Mobile
Less Comfort

Tepee   paraSITE   Refuge   Homeless   Furtive   Park   Bus   City   Airstream   Shipping
                    Wear &   Vehicle   Bench Shelter Sleeper Trailer Container
                    Body Arch Project   House House

9.5 Learning from Example

Each of the case study projects, share several important similarities. They represent a collective of small-scale interventions with a mode of practice that explicitly expresses the philosophy of Harvey, Lefebvre, The Situationist International, Tschumi, and architect Donald MacDonald. These alternative approaches to homelessness took on a non-reformist attitude, which respects the lifestyle of the homeless, as interventions to improve the comfort of living in the streets rather than designing yet another emergency shelter.

What could have been easily misunderstood as something negative – drawing an analogy between parasites and homeless people – was turned into a positive architectural approach. The symbolism was not intended to be derogatory; it was an observation of reality and further exploited, contrasting the differences between those who have homes and those who don't. They are provocative: they shed a different light on the subject, creating a new kind of dialogue about homelessness in the city.

Figure 9.5 (opposite): spectrum of portable living structures in order of mobility and comfort

Figure 10.1 (below): concept diagram inspired by
Tschumi's distribution of program at Parc de la Villette,
compiled by author
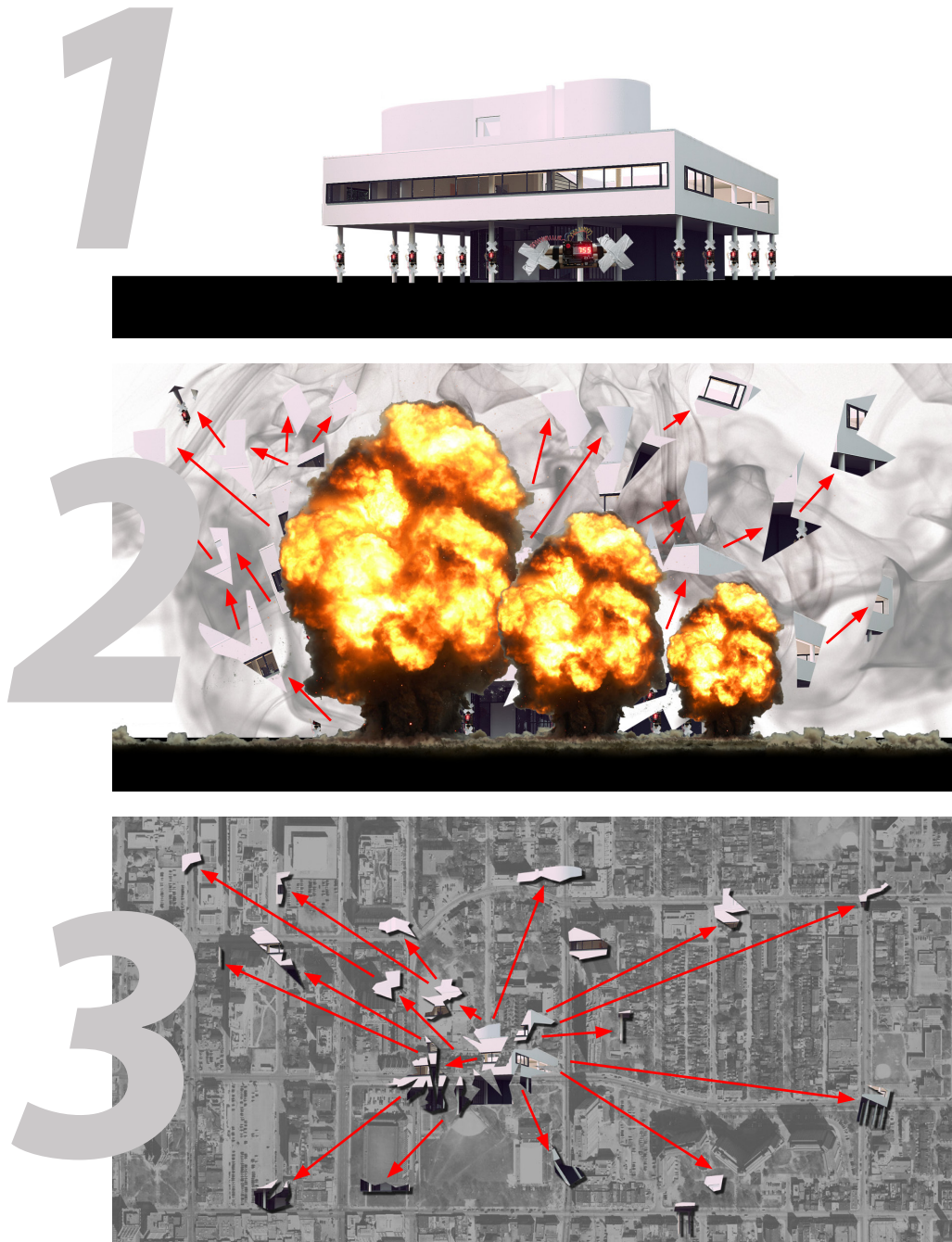
THESIS PROJECT:
LIGHT POST HOUSE & INFLATABLE INSULATED TENT

10.1 Approach, Concept, and Clientele

Residual space as we have defined it can be any scale and occur anywhere during anytime throughout the day. It was also recognized that minority groups such as the chronically homeless take refuge here because of its informal setting. The refusal of help, shelter, and permanent housing also meant that people were left to fend for themselves.

It is in the interest of this thesis to seek alternative methods of housing the homeless, focussing on a smaller minority group within the outdoor homeless population. If the rigid structures and preconditions of institutionalization are undesirable to a group who feels they are "independent" and that "life on the streets is better", then I argue for an unregulated and informal shelter that remains nowhere else but the streets. The traditional meaning of home is shattered and exploded, its constituent parts landing anywhere and everywhere in the city. Like the demolition of Pruitt-Igoe which many associate with the end of modernism, the explosion of Villa Savoye marks the end of order, hierarchy, traditional values, and institutional structures.

The design response was a culminations of ideas explored throughout this thesis (sections 4–9) beginning with the Situationist International, Harvey, Lefebvre, Maslow, Benedikt, and case study projects, In the spirit of the Situationist International whose proposition to humanize society was to respect the choices of individuals, the intervention proposed followed this non-reformist approach as have seen in the case study projects explored.

Recognizing that 17.9% of outdoor homeless prefer the streets, it implies a response for this urban setting and mobility being a major concern. Unlike open spaces, streets have a lot more to offer and to fully benefit from it – like how paraSITE and Furtive have – it has to be recognized as a free source (of energy, security, shelter, etc.).

Above all, there are no rules or preconditions of use – much like sidewalks, parks, or vacant lots – that caters to personal basic needs such as warmth, shelter, and water. It caters to a transient population who may not permanently settle at a particular location for long periods of time but accommodates an urban nomadic lifestyle.

Figure 10.2 (below): model of the relationship between travel and home for the sheltered and unsheltered.

Home · School · Cafe · Park
Mall · Library · Work · Restaurant

Sheltered | Homeless

89
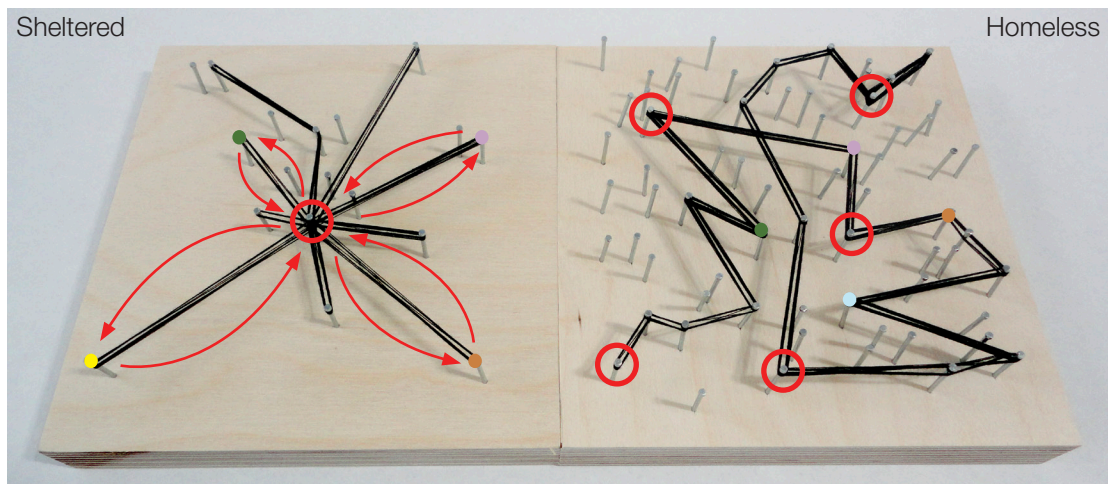
Even having narrowed down to a smaller population of homeless people in Toronto, there still remain a great deal of complexity in their desires, mentalities and philosophies. No two people are alike, and with that said; there cannot be a one-size-fits-all solution. It is impossible to predict people's needs, because decisions made today can be changed tomorrow, but based on the research on homeless we can project and draw from those findings four fictional client types to design for:

- Client 1: feels more comfortable taking residence in Moss Park due to the availability of acquaintances/ friends, social services, etc.

- Client 2: would rather be off on their own, who is comfortable sleeping in any public space

- Client 3: would rather be off on their own but feels more secure sleeping in storefronts (only having two sides of exposure) as opposed to open sidewalks

- Client 4: is a collector, or what Wodiczko referred to as "scavengers"

Because of these parameters, the project takes many forms and transformations, but can be more manageably understood as a two-part design: a permanent shelter station (Light Post House) and an inflatable insulated tent (IIT). Each can be used on their own or collectively. The inflatable tent provides shelter when one finds him or herself in a location without a Light Post House. Client 1 would mainly use Light Post House with or without the Inflatable Insulated Tent (IIT). For Clients 2-4, refer to section on IIT.

Figure 10.3 (opposite): a collection of images illustrating a diverse group of homeless people, and inherently along with that, a diverse set of mentalities

Figure 10.4 (above): an early
conceptual model of Light Post House

Figure 10.5 (above): cardboard/
plywood model of Light Post House

10.2 Light Post House (LPH)

If streets are the place for a new architecture, then mono-functional infrastructures that are so ubiquitous and integral to sidewalks are a source of exploitation. In the urban setting, one cannot do as pre-urban nomads did by cutting down branches and building a shelter. Trees are protected, limited in number and insufficient in scale. What is available and ready to be tapped into are light posts. They provide lighting for the streets and are wired with electricity.

It is symbolic of an exploded fragment from the dismantling of traditional thought and ideals in approaches to homelessness. Drawing from an analogy of the tree and the tree house, and parasitic responses by Rakowitz and Roche, street lights become the support structure for the pre-fabricated shelters that are attached to it. Because of its permanent presence on streets, it becomes a point of contact for those who want to be located or be in touch with social services. It provides one with a physical address to receive mail and a virtual address (via the touch screen computers located within bus shelters). Users are able to log-in to his or her account and be updated on community news; emails from social workers; locations of soup kitchens, sidewalk grates, emergency shelters, mobile dental and medical vans, thrift shops, and so on.

Figure 10.6 (below): over four hundred light posts are located as possible locations for modification to Light Post House. Various conditions are noted for appropriate selection of street furniture integrations.

N
0 50   200m

Existing BIXI Stations
Condition 1: Parking
Condition 2: W/O Parking
Condition 3: Intersection

Jarvis Street
Sherbourne Street
Parliament Street
Gerrard Street
Dundas Street
Shuter Street
Queen Street
Richmond Street

The project will not have one particular site but consists of many sites within the context of Moss Park. The first phase will address all 400 outdoor homeless people in Toronto, beginning with a modification and replacement of city light standards. Different prototypes will address different street settings as follows:

- Type 1: typical shelter with upper platform
- Type 2: typical shelter with upper and lower platform where street parking is prohibited
- Type 3: typical shelter with upper and lower platform where street parking exists and parking spaces are reclaimed for bicycle parking and Bixi bicycles
- Type 4: typical shelter at major intersections where bus shelters are required
- Type 5: shelter with washroom and shower

Among these types are a series of street furniture that can be combined with the shelters for a more coherent street furniture standard. These include newspaper boxes; mail boxes; garbage, recycling and compost bins; mail box; bicycle locking stations; water fountains; parking meters; and information tickers (for time, temperature, next bus countdown mater, and vacancy of shelter).
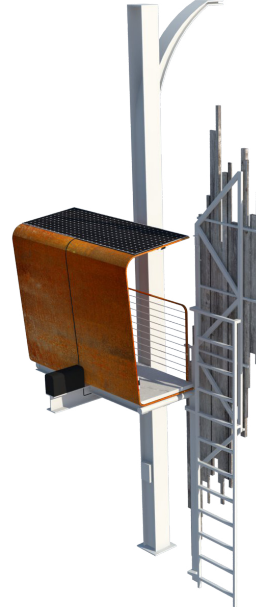
*Figure 10.7 (above): two standard
typical prototypes: one with a
ladder and the other a step ladder*

*Figure 10.8 (opposite): a collection
of components that can be
integrated with Light Post House*

96

Streetcar Shelter

Mail and Newspaper Box

Lower Shelter Platform
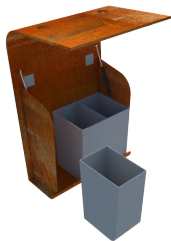
Garbage, Recycling, Compost
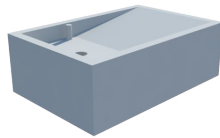
Drinking Fountain

Parking Meter

LCD Touchscreen

Washroom & Shower
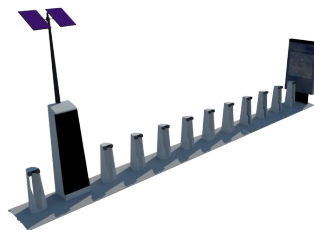
BIXI Bicycle Station

Bicycle Rack
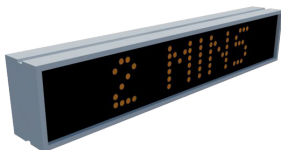
Streetcar Countdown Ticker
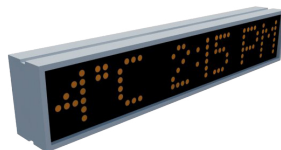
Time/Temperature Ticker
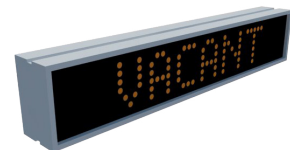
Washroom/Shower Vacancy Ticker
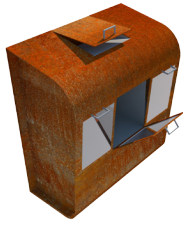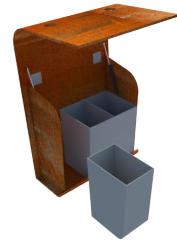
Streetcar Shelter   +   Mail and Newspaper Box   +   Garbage, Recycling, Compost
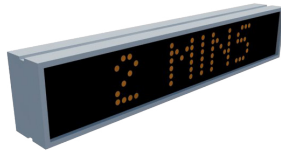
Streetcar Countdown Ticker   +   LCD Touchscreen

=

Figure 10.9 (above): streetcar shelter

Lower Shelter Platform

+

Mail and Newspaper Box

=

Figure 10.10 (above): shelter with upper and lower platform

99
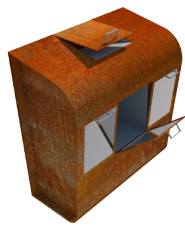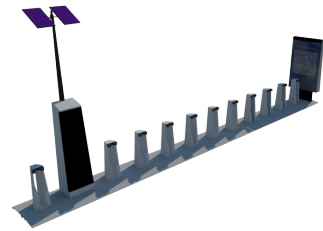
Lower Shelter Platform   Mail and Newspaper Box   BIXI Bicycle Station
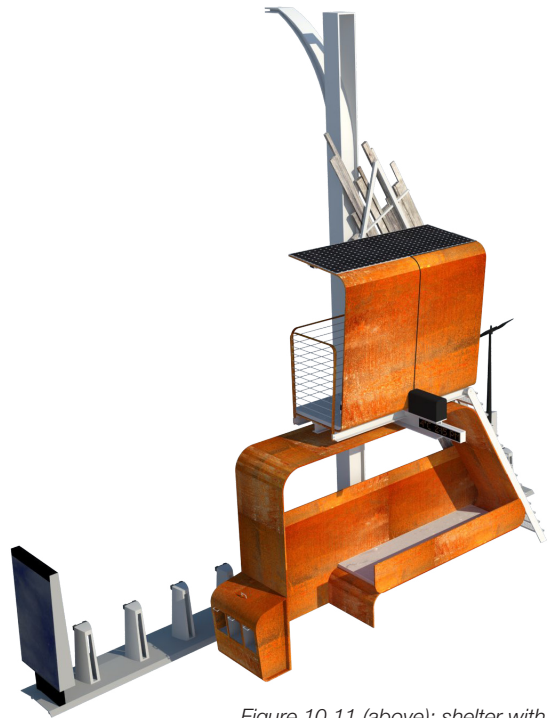
Figure 10.11 (above): shelter with both platforms and a Bixi Station

Bicycle Rack

+
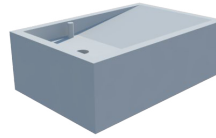
Drinking Fountain

=

Figure 10.12 (above): shelter with bicycle rack and water fountain

101

Washroom & Shower   Drinking Fountain   Washroom/Shower Vacancy Ticker
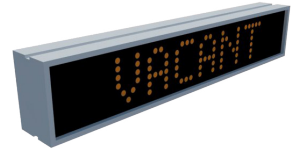
*Figure 10.13 (above): shelter with washroom/
shower, drinking fountain and vacancy ticker*

If space on the ground is potentially dangerous and contested, then certainly elevating (physically and metaphorically) one's living condition is an attempt to free up space on the ground while simultaneously providing security and privacy. Sidewalk space is narrow in Toronto and having platforms at grade also obstruct views of shops, offices or homes. Thus, shelters would be elevated ten feet above the ground minimizing its impact.
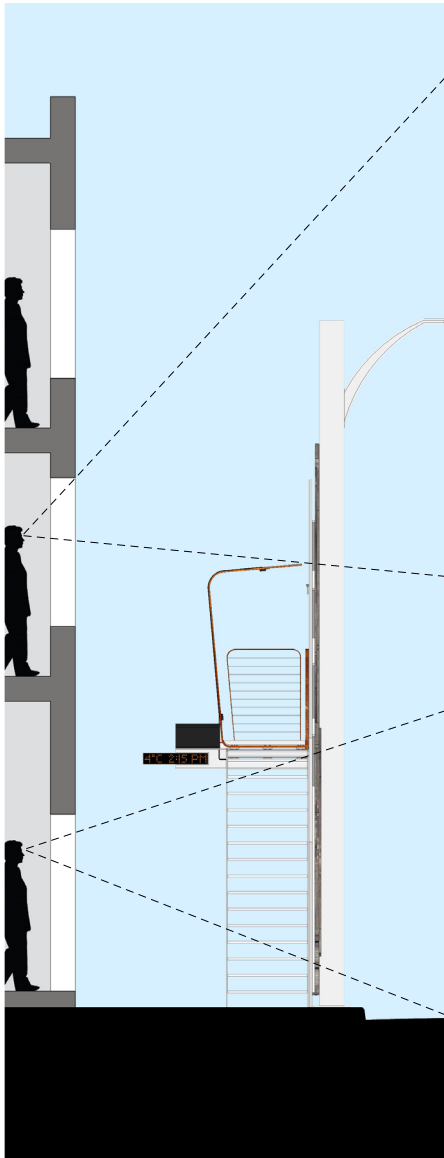
Figure 10.14 (left): section through building, sidewalk, and Light Post House illustrating height and view relationships

Shelters are accessed by step ladders in areas with sufficient sidewalk width, another option utilizes a ladder. In both cases, the ladder or step ladder can be raised and locked in position for extra security and privacy.

Each shelter provides a platform to sleep on integrated with electrical radiant flooring, LED lighting on the ceiling and on the wall with electrical outlet, thermostat, and compressed air. Photovoltaic panels mounted on the roof would provide electricity to the unit. Light posts would be integrated with city utilities including water, electricity, and telecommunication (including Wi-Fi).

Water Main

Bell Canada Conduit

Gas Main

THES Conduit

Sewer Main
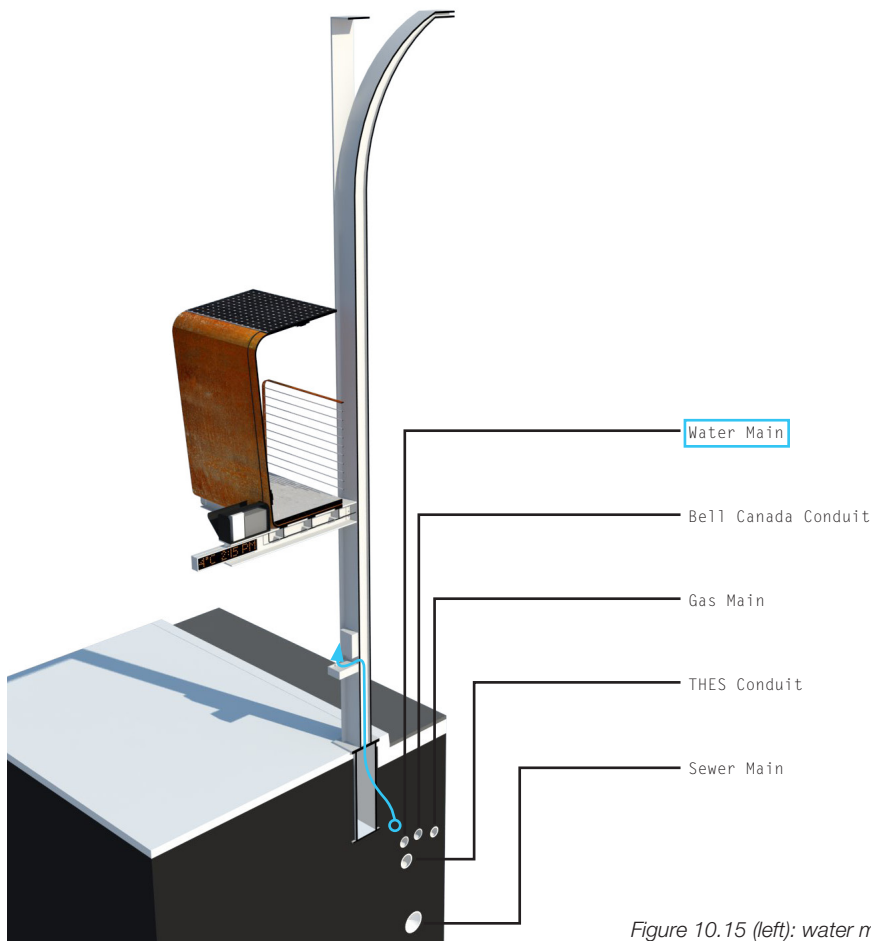
Figure 10.15 (left): water main connection diagram

Water Main

Bell Canada Conduit

Gas Main

THES Conduit

Sewer Main
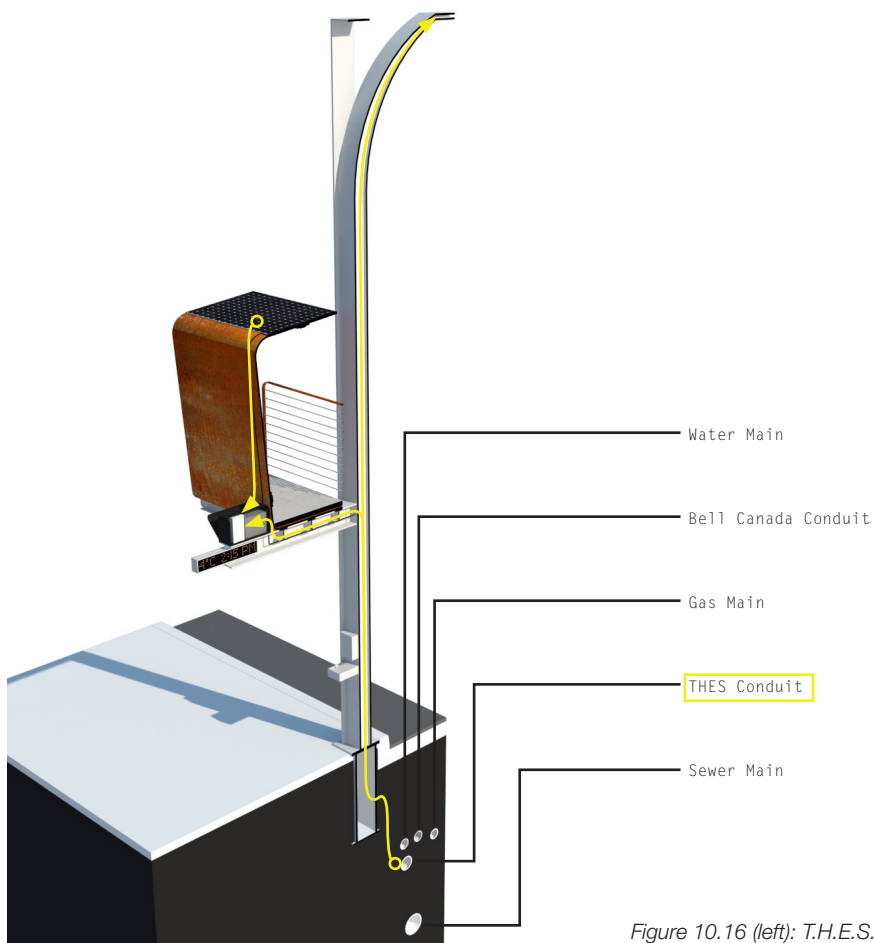
Figure 10.16 (left): T.H.E.S. connection diagram

105

The shelter and light post are constructed of galvanized painted steel for durability and to avoid rusting. The shelter "ribbon" that forms the floor, wall, and roof is made of COR-TEN weathering steel. COR-TEN was chosen for its physical properties but also metaphorically the aging of the material makes it stronger and less prone to further rusting, in hopes the life of the homeless also improves that way. The raw industrial aesthetics where components are exposed represent the realities of homelessness, it is bold and present, not beautified or decorated with ornamentation.

Water Main

Bell Canada Conduit

Gas Main

THES Conduit

Sewer Main
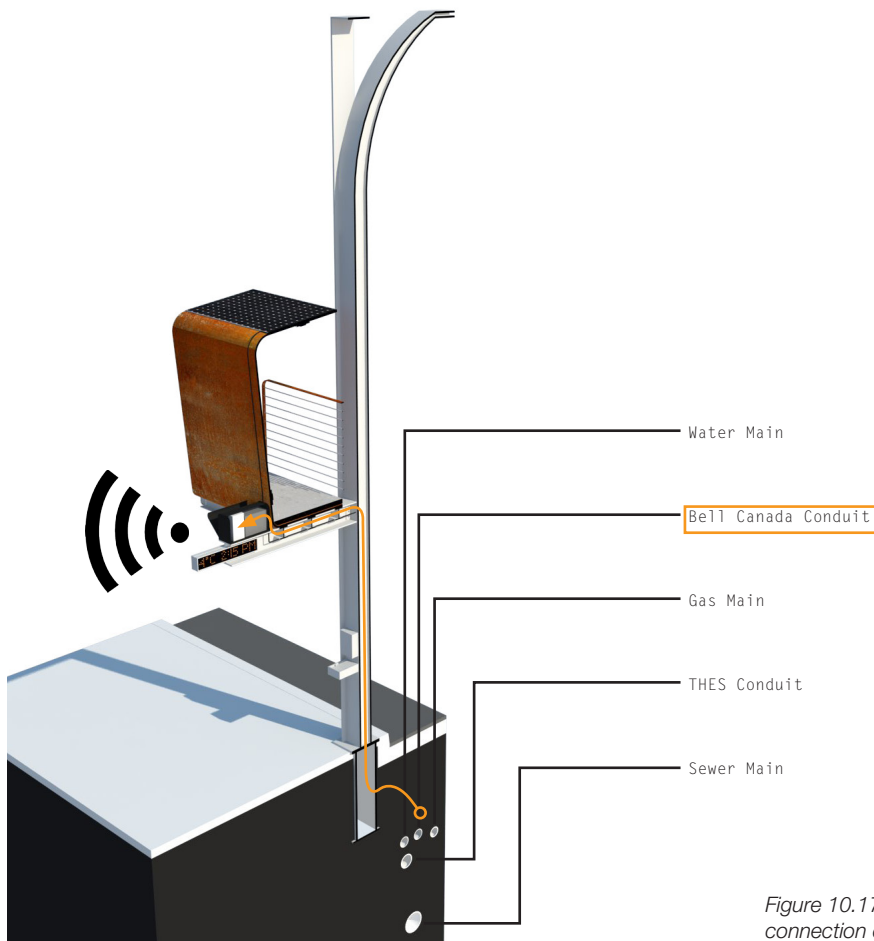
Figure 10.17 (left): telecommunication connection diagram

Prefabricated components were designed to be as flat and compact as possible, making it efficiently transportable and quickly installed so that shelters can reach more people in a shorter amount of time, because housing the homeless is an emergency.
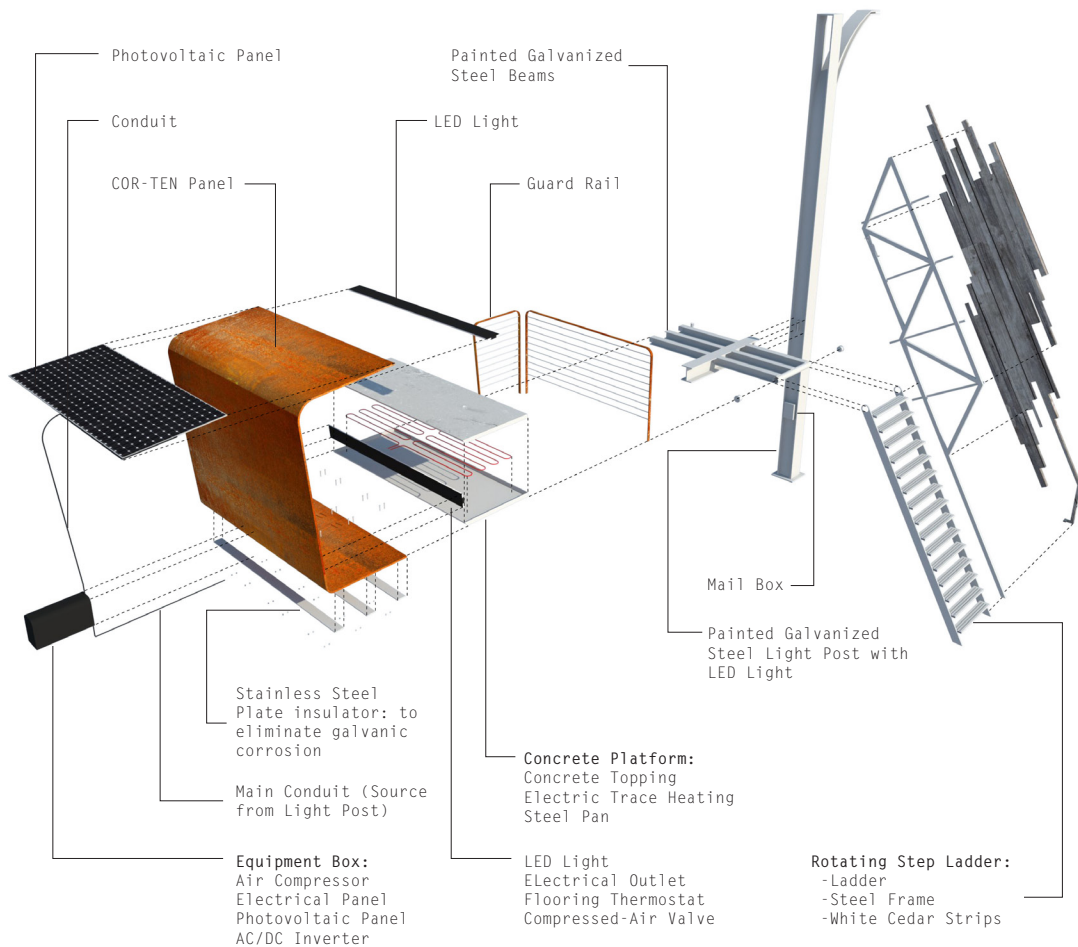

Photovoltaic Panel

Conduit

COR-TEN Panel

Painted Galvanized
Steel Beams

LED Light

Guard Rail

Mail Box

Painted Galvanized
Steel Light Post with
LED Light

Stainless Steel
Plate insulator: to
eliminate galvanic
corrosion

Main Conduit (Source
from Light Post)

Equipment Box:
Air Compressor
Electrical Panel
Photovoltaic Panel
AC/DC Inverter

Concrete Platform:
Concrete Topping
Electric Trace Heating
Steel Pan

LED Light
ELectrical Outlet
Flooring Thermostat
Compressed-Air Valve

Rotating Step Ladder:
 -Ladder
 -Steel Frame
 -White Cedar Strips

Figure 10.18 (above): exploded axonometric of LPH construction

107

Approach

Ascend

Lift and Fasten Step Ladder

Use
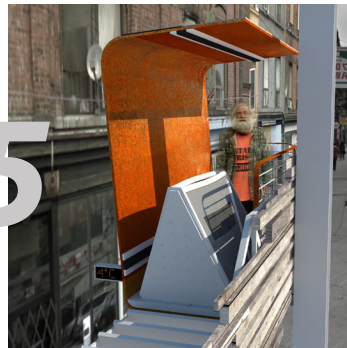
Use With Tent

Figure 10.19 (above): a-day-in-the-life use sequence

108

Figure 10.20 (above): street rendering

109

Figure 10.21 (above): rendering of IIT in use on top of sidewalk grate

110

10.3 Inflatable Insulated Tent (IIT)

The triangulated form was chosen for its structural rigidity and efficiency, but more importantly for its resemblance to a typical camping tent. Inspired by the Situationist's concept of détournement, where the meaning of existing objects are displaced from its native context and subjected to a new one to juxtapose and create new meaning, the camping tent was taken out of its park/campground setting and placed in the urban setting.

Similar in the fashion that paraSITE was a protest device; IIT challenges the idea of camping in regulated provincial parks versus camping in the city. According to Ontario Parks' Park Rules and Regulations, camping in designated parks requires a valid permit – a form of legitimacy and approval (2007). Yet, camping in the city, is either shunned, made illegal (in Vancouver and some U.S. cities), or one becomes evicted (as in Tent City).

Figure 10.22 (above): IIT compact enough to be used within storefront

10.3.1 Main Prototype: Sidewalk Heat Grate Harvester
Scenario

IITs are distributed by shelters, social service offices, and other assistant groups, to any individual who needs one without any preconditions or limitations.

The base model consists of a kit-of-parts on which other variations are based upon. What this allows is user customisability that is adaptive to the environment they so choose to reside in. Secondly, should any part fail or break, it can be easily replaced at any distribution center immediately. The old part can also be returned for repair and recondition, prior to its recirculation to a new user. That way, there is no wait time. Third, a kit-of-parts scenario is more economically and environmentally viable.

Unlike a typical camping tent, IIT was specifically designed for the urban nomad. Its weight and size caters to single individuals living rough. It exploits the potentials of streets and sidewalks in an urban setting by harvesting exhaust air from grates and wall-mounted vents.

113

Kit-of-Parts

IIT is an inflatable frame made of PVC membrane found in many temporary structures, camping mattresses, and the like. All other parts are attached via waterproof zippers or suspended with Velcro straps. Its inflation bladder is divided into two zones for a more compact footprint. It measures three meters in length, one meter in width, and one meter in height. The interior is shared by a two meter long interior insulated shell, with the remaining one meter space for storage.

The dual-layer flooring is made of waterproof ripstop nylon attached with waterproof zippers. The outer layer is perforated to collect warm air from building exhaust grates while a second (non-perforated) layer attached on top, seals the tent.

Exterior panels made of Windstopper membrane coated with polyurethane are attached to the frame with zippers followed by a meshed insect screen attached using the same method.

Figure 10.23 (below): tent frame
shown with two zones of inflation

AIR CHAMBER ZONES
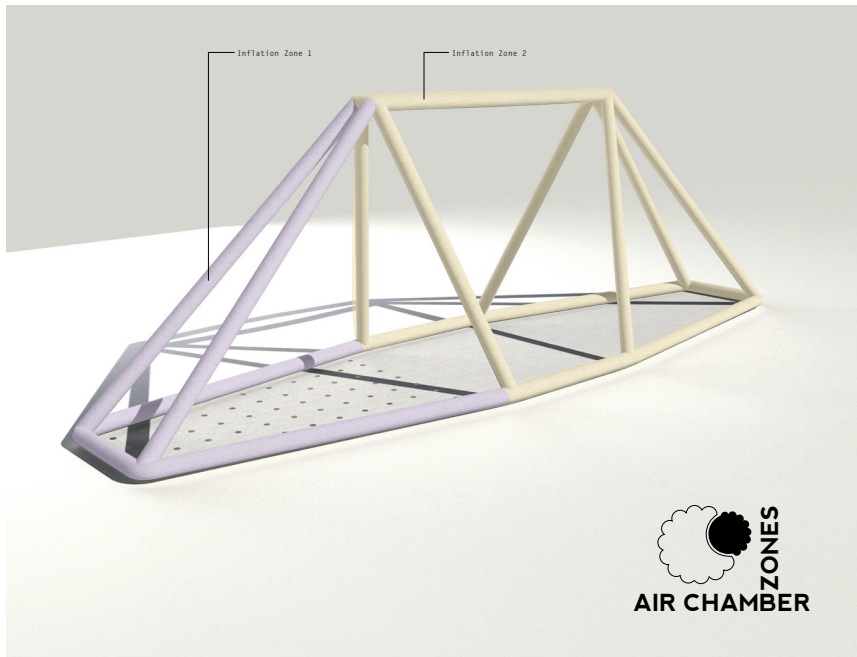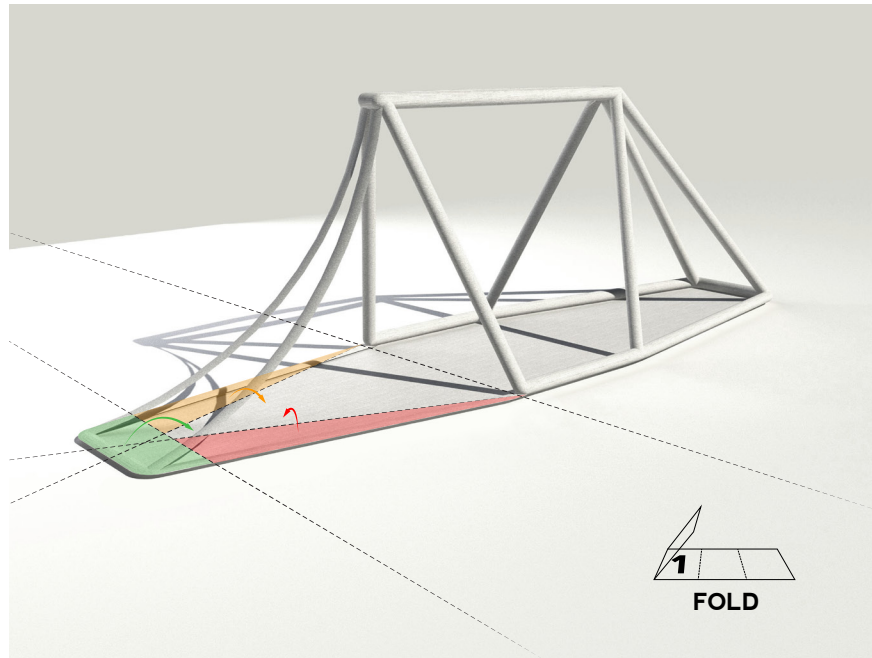
*Figure 10.24 (above): deflated zone 1
shown with fold lines
Figure 10.25 (below): zone 1
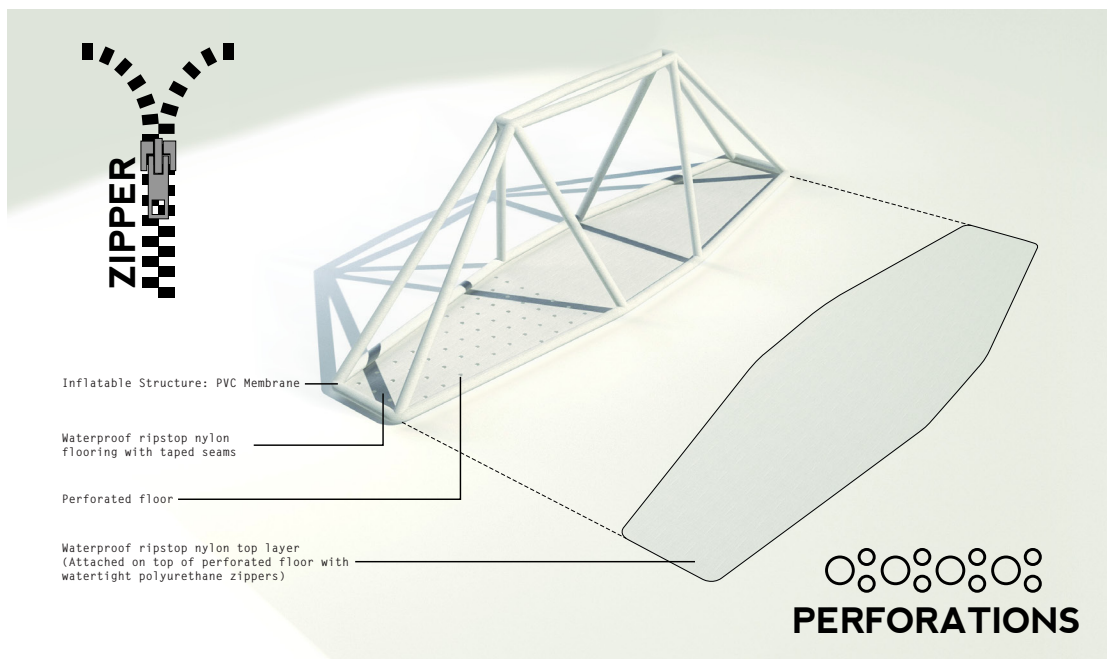compacted and folded up*

115

VELCRO

FOLD 3
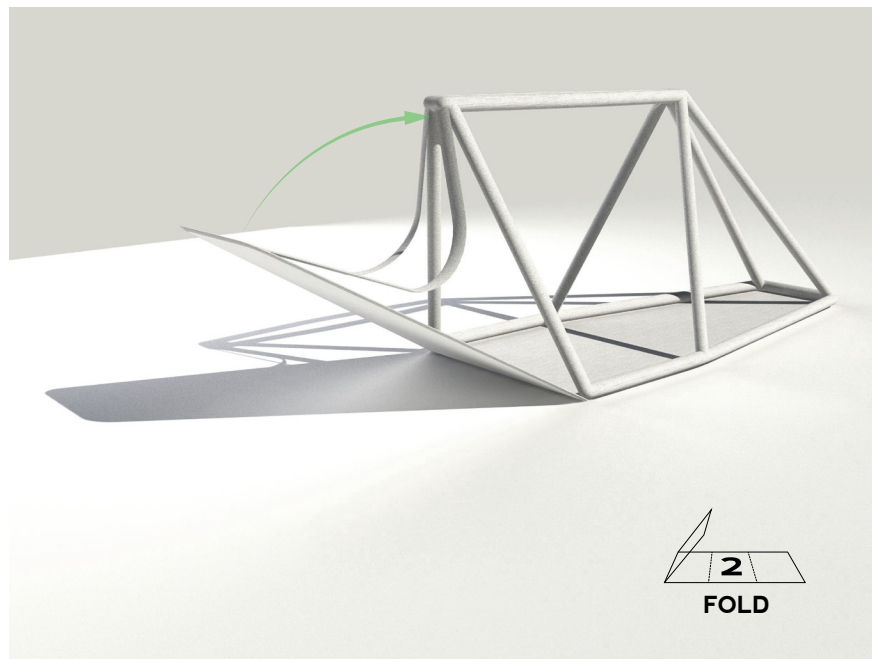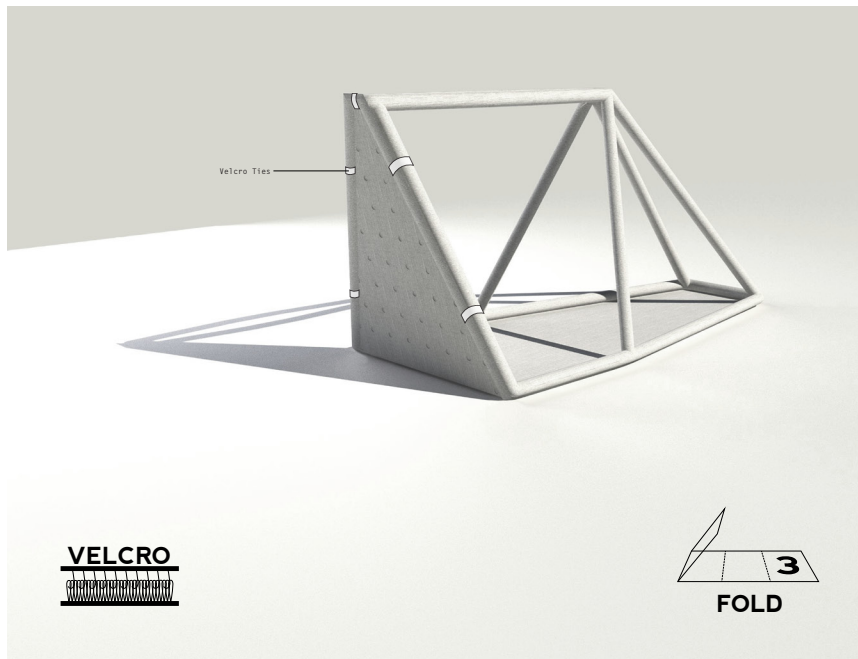
Figure 10.26 (above): zone 1 flaps secured with velcro straps
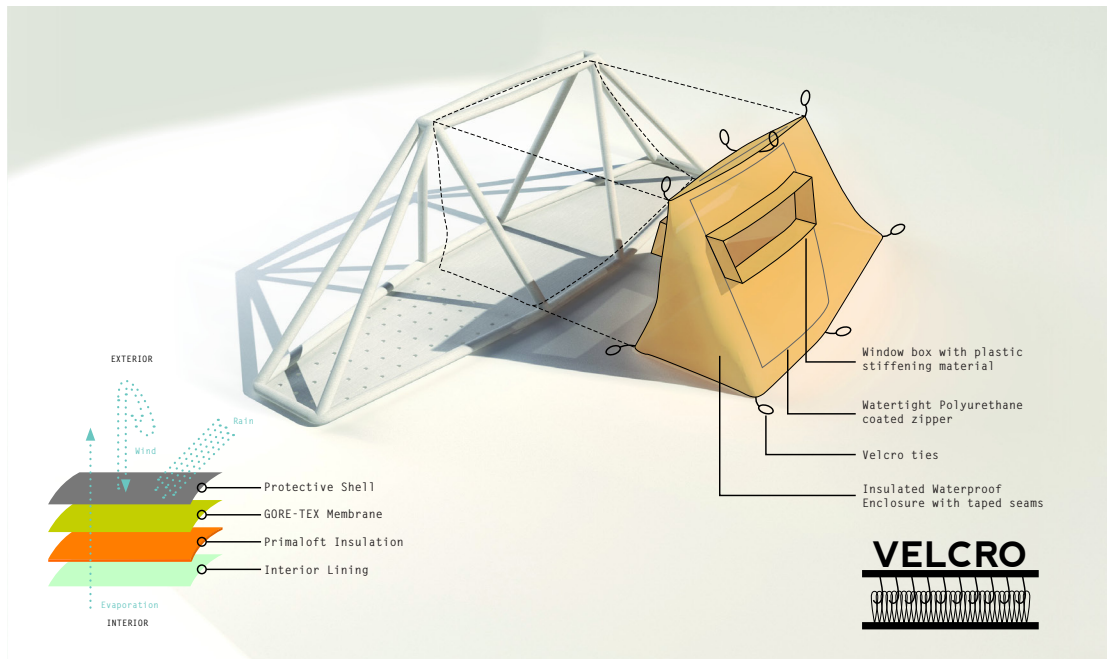*Figure 10.27 (below): inflatable frame and flooring connection*

ZIPPER

Inflatable Structure: PVC Membrane

Waterproof ripstop nylon flooring with taped seams

Perforated floor

Waterproof ripstop nylon top layer
(Attached on top of perforated floor with watertight polyurethane zippers)

PERFORATIONS

EXTERIOR

Rain
Wind

Evaporation
INTERIOR

Protective Shell
GORE-TEX Membrane
Primaloft Insulation
Interior Lining

Window box with plastic
stiffening material

Watertight Polyurethane
coated zipper

Velcro ties

Insulated Waterproof
Enclosure with taped seams

VELCRO

Figure 10.28 (above): interior
insulated shell connection
Figure 10.29 (below): mesh insect
screen connection

Mesh insect screen
(Attached to frame with zippers)

ZIPPER
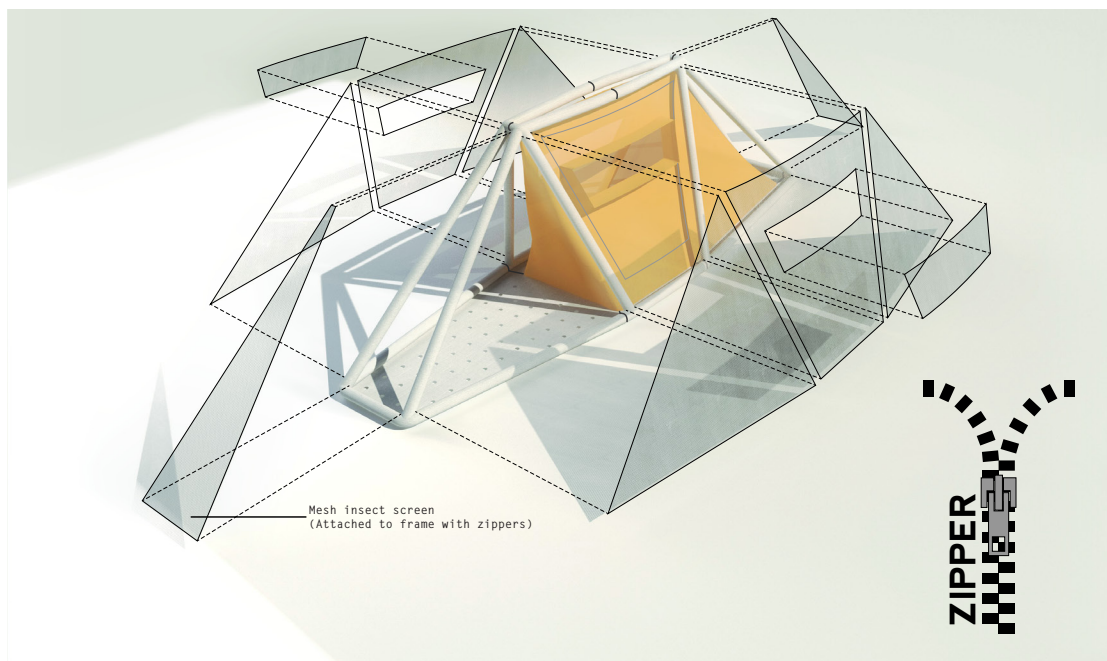
A second shell on the interior, measuring two meters in length is insulated and suspended/attached to the inflated frame via Velcro straps. This is the main sleeping area during colder months. This second enclosure separates the user from direct exposure to exhaust air, and uses side windows to direct in fresh air for breathing. It uses an outdoor mountaineering jacket construction consisting of an outer protective shell, Gore-Tex membrane, synthetic Primaloft insulation, and an interior lining. This construction is lightweight, breathable, durable, and waterproof.

Figure 10.30 (below): exterior shell connection

Windstopper membrane with
polyurethane coating
(Attached to frame with zippers)

ZIPPER
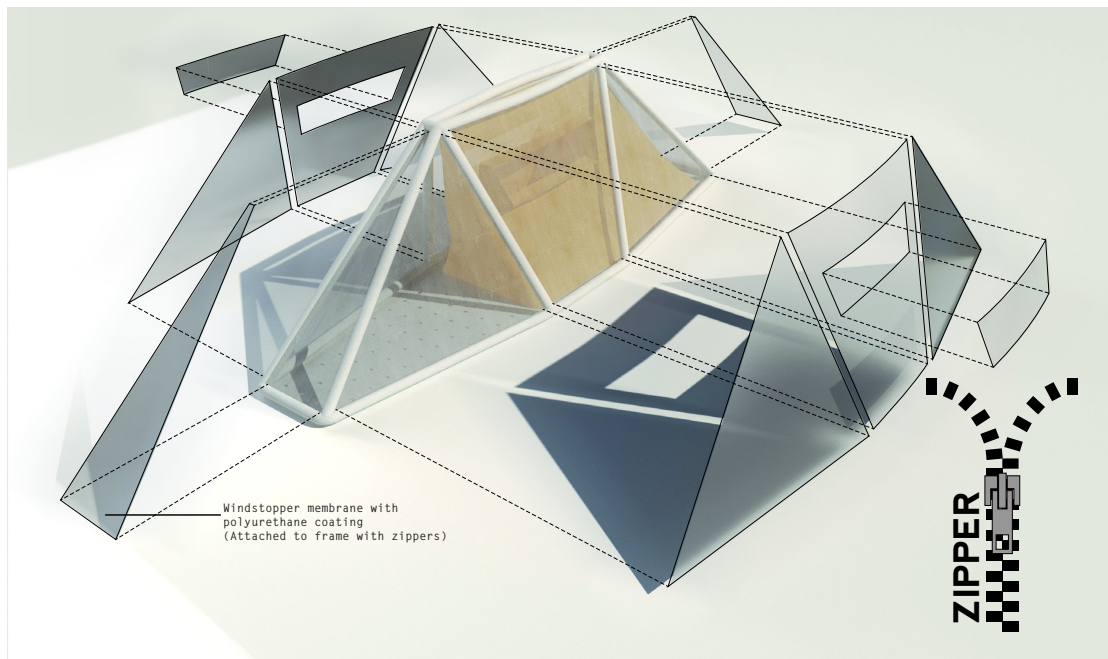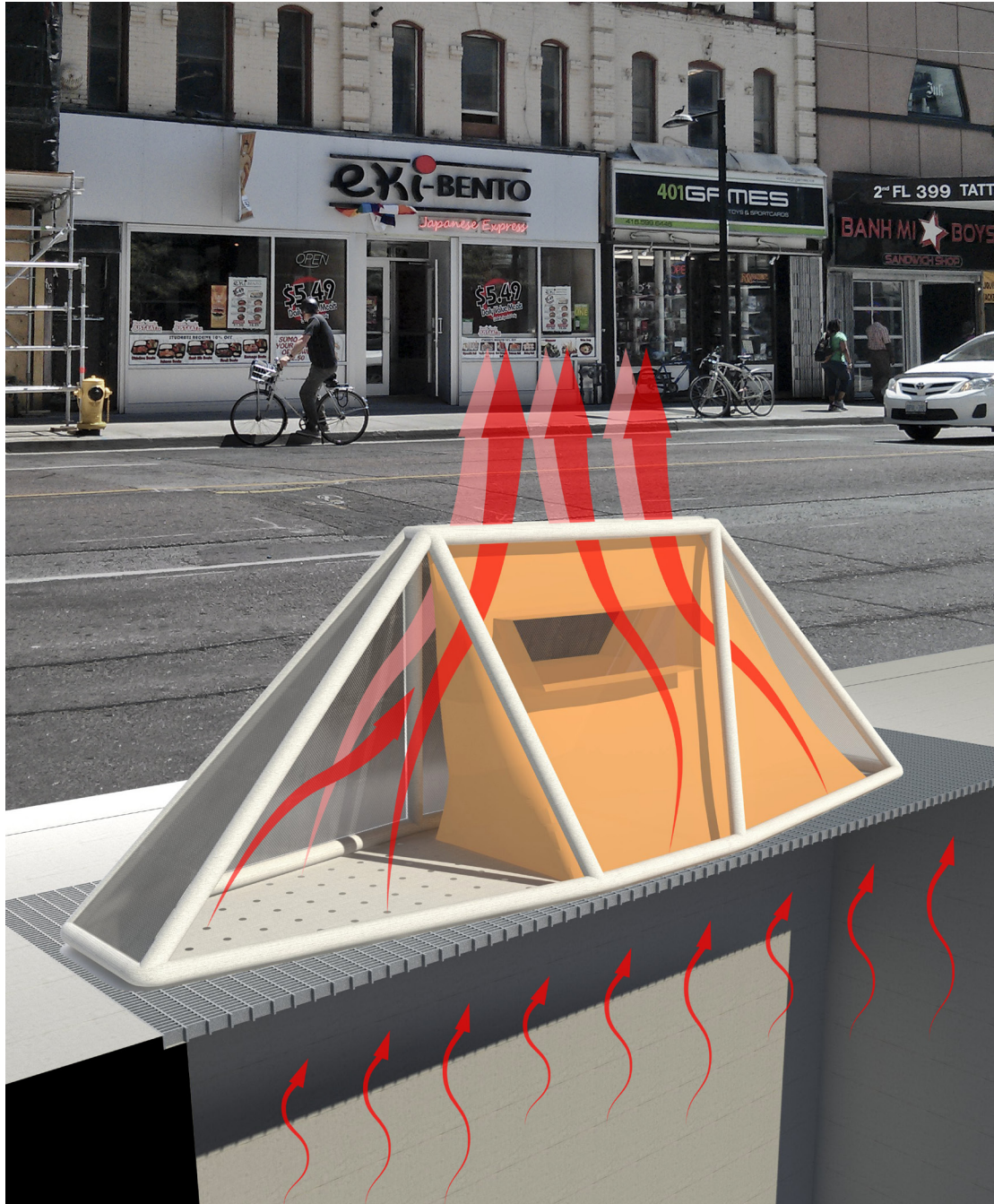
Figure 10.31 (above): heat transfer from grate to tent

119
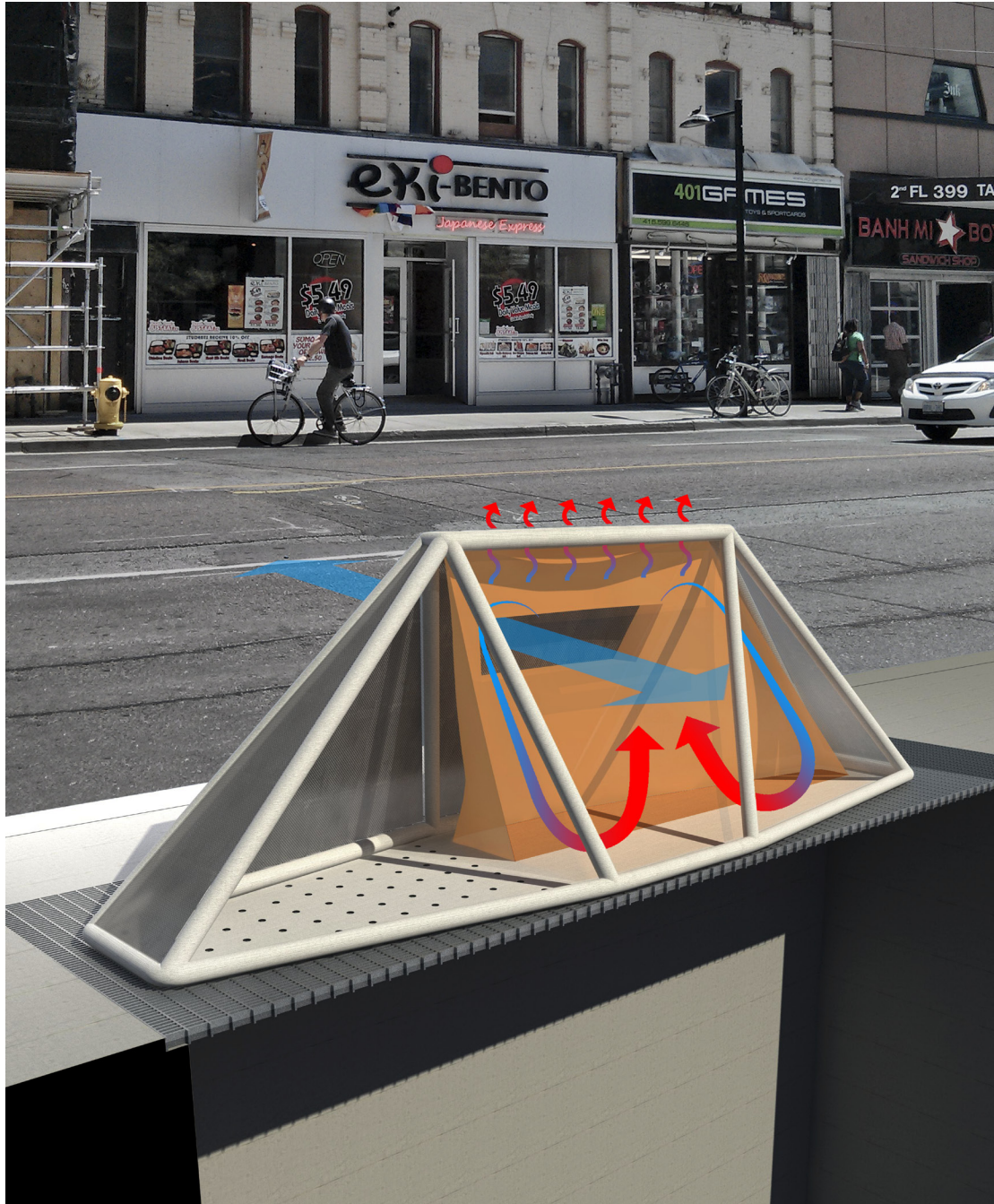
Figure 10.32 (above): interior insulated
shell air ventilation and circulation

120

Warm air rising from sidewalk exhaust grates rise through the perforated floor, creating a warmer microclimate inside the exterior shell and funnels out at the top. Fresh air enters the side windows directly into the interior shell while a waterproof zippered vent at the top can allow air to escape.

10.3.2 Type 2: Wall-mounted Vent Harvester

Those who feel more comfortable sleeping adjacent a wall or within a storefront can do so without compromise, using a different end panel to draw warm air into the shell. This can also be used by someone who does not have immediate access to a sidewalk grate. The original end panel and insect screen are removed and replaced with a tubular section made of the same material. It can be attached to a wall-mounted vent or pipe using Velcro straps to direct air into the chamber.

Figure 10.33 (below): exhaust air from wall-mounted vent harvested to tent

ZIPPER

Wall-mounted exhaust air
redirection panel

Same material as outer shell:
Windstopper membrane with
polyurethane coating
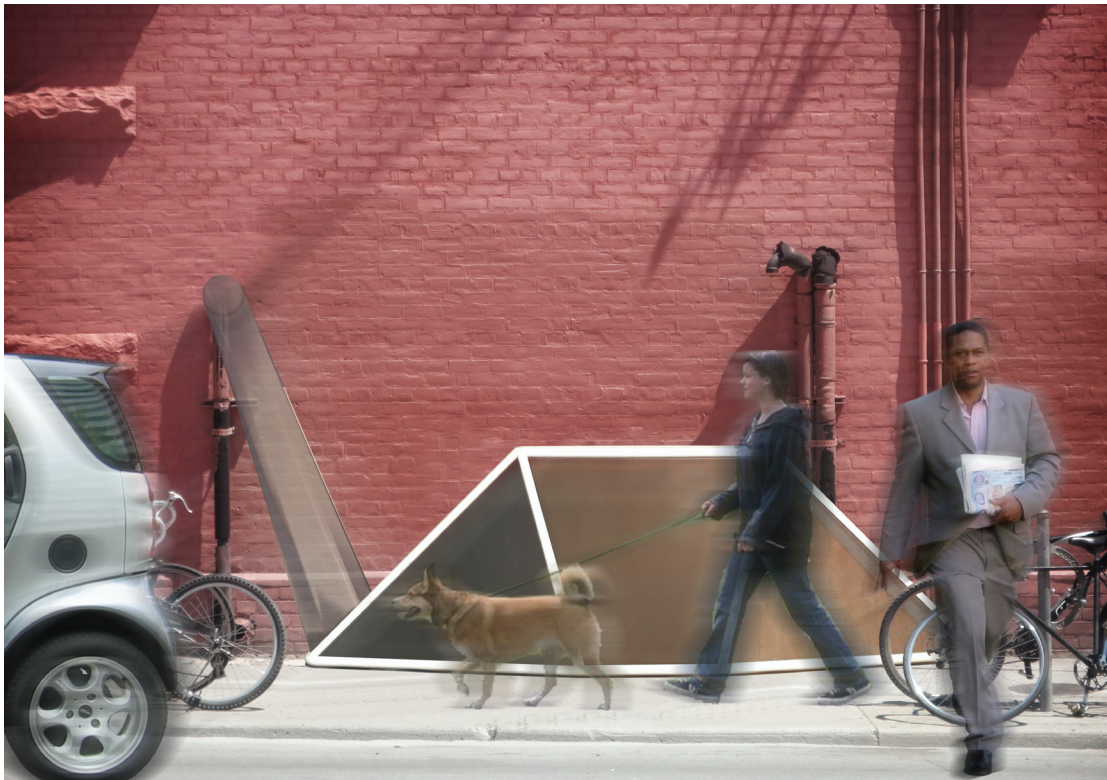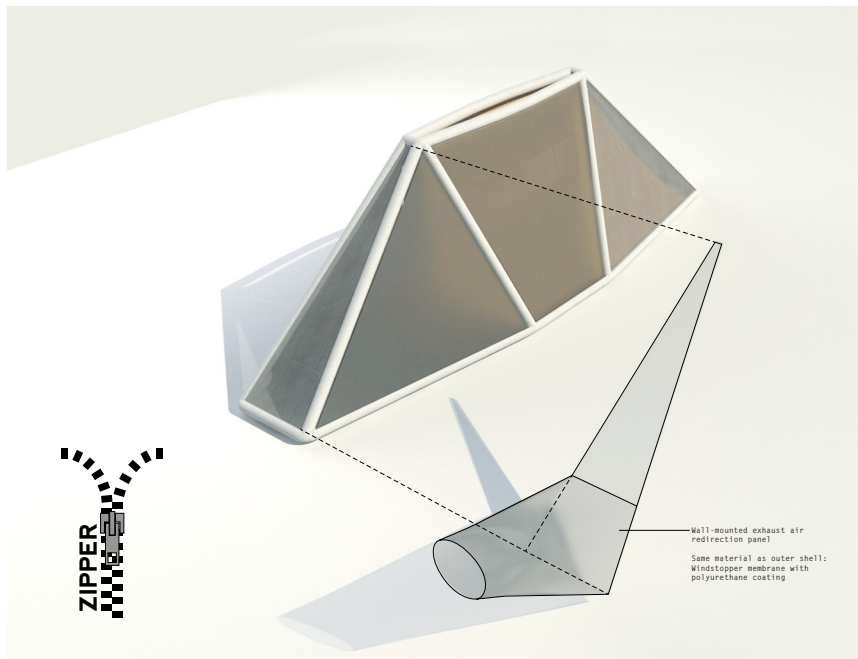
*Figure 10.34 (above): duct replaces
end panel and mesh
Figure 10.35 (below): duct installed
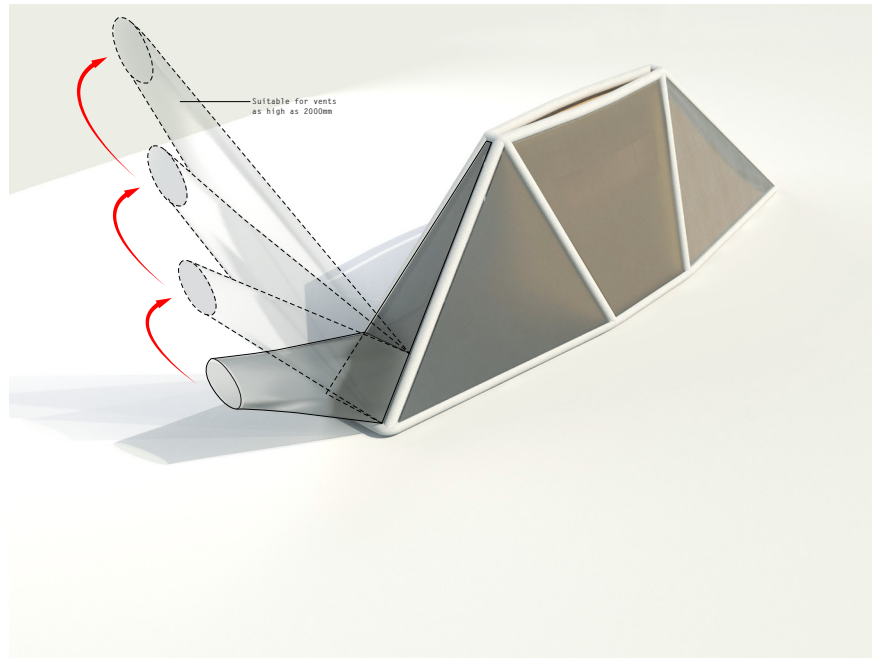with waterproof zippers*

Suitable for vents
as high as 2000mm
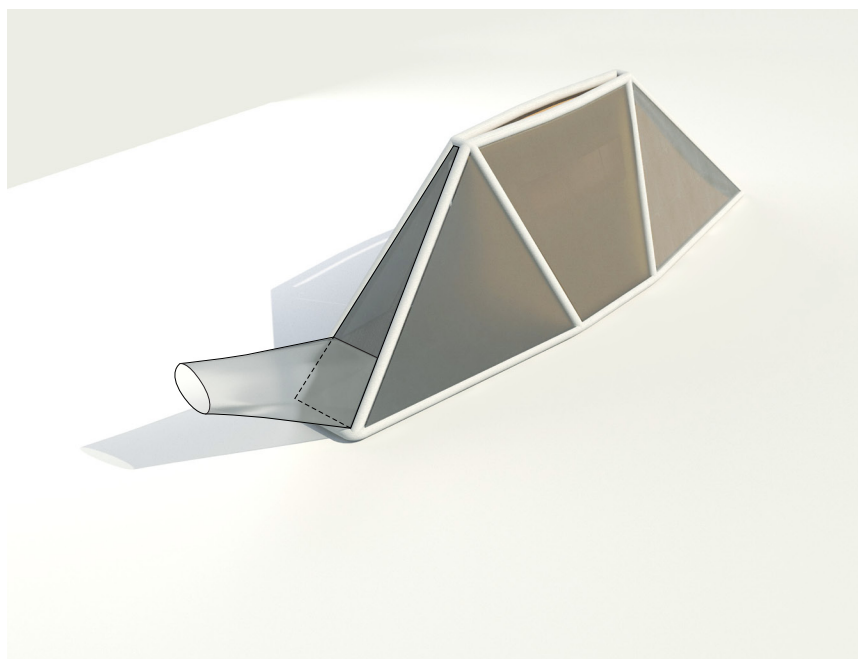
Figure 10.36 (above): duct can
accommodate up to 2 metres high
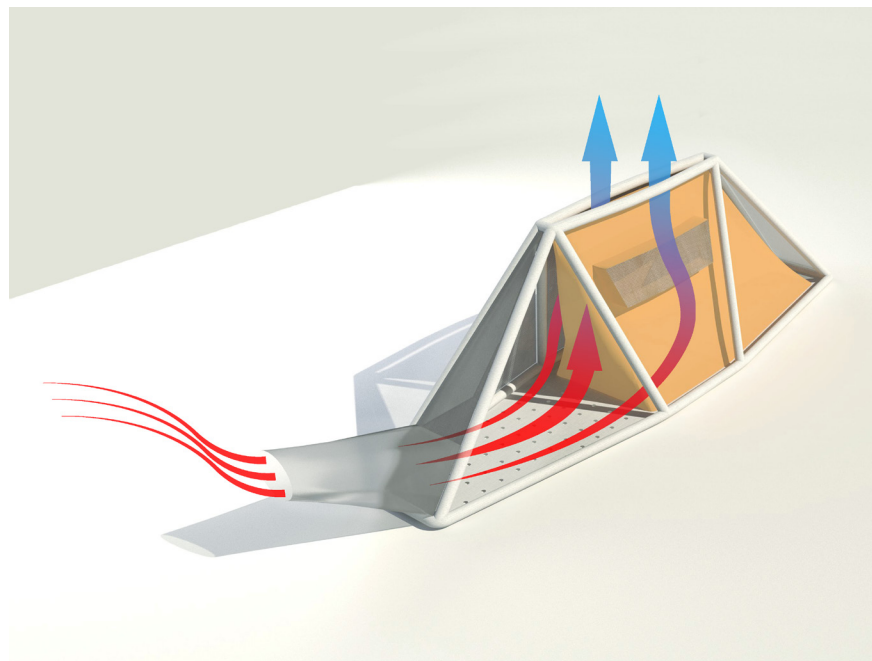Figure 10.37 (below): heat transfer
from wall-mounted vent to tent

Figure 10.38 (above): rendering of collection bicycle home in use at Moss Park

10.3.3 Type 3: Collection Bicycle (CB)

"For most homeless people, rest is a luxury. When people are unsheltered, they don't have a home within which to retreat for rest and relaxation. Often they are challenged to get the full amount of rest and sleep that human beings need to function effectively in the world. Further, each day many homeless people are busy with a host of activities, including locating work opportunities, going to government agencies, arriving at health appointments, attending food services, discovering shower facilities and finding rest rooms. The time involved in accomplishing each of these activities depends upon their availability and their proximity to homeless people"

Christine Schanes, J.D., Ph.D. (Consultant, public educator and attorney in the area of homelessness) (Schanes, 2010)

It is recognized that homelessness is exhausting and walking is usually the only means of transportation. Home, might not be at the same location as the previous night, it is literally where one is located at that moment in time. The tent component offers a sense of freedom, knowing there is one less thing to worry about, and be able to erect a comfortable sleeping space should one feel the need to do so.

Figure 10.39 (below): private/public companies in joint force donate their resources and craftsmanship to create the Collection Bicycle mobile home

Figure 10.40 (opposite): integration of collection bicycle and inflatable insulated tent

Grocery Cart Basket

Rear section of Bixi Bicycle

Time and Craftsmanship
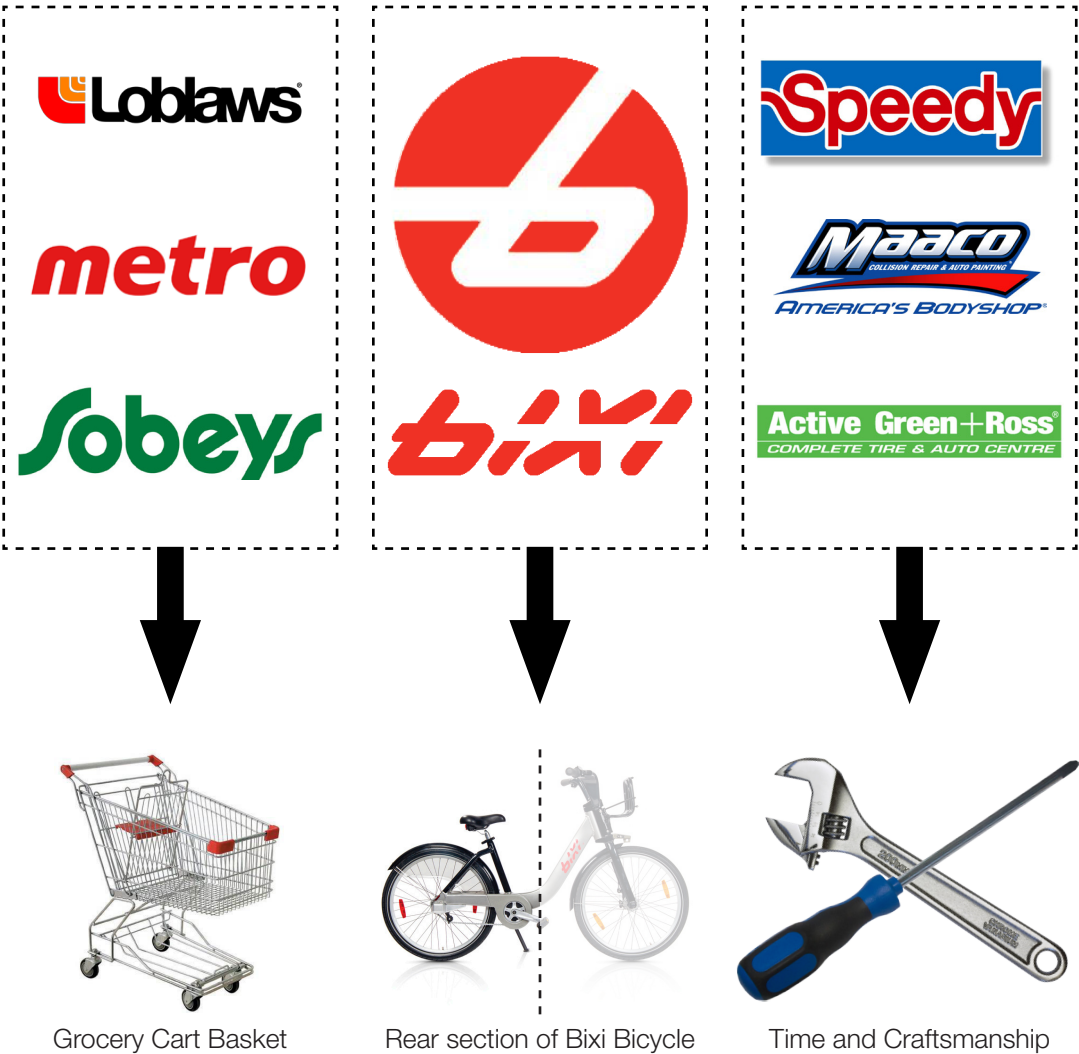
Scenario

It is commonly known that some homeless people push grocery carts around to carry their belongings and possibly items for economic sustenance such as cardboard or recyclable cans and bottles. What might improve this situation is an easier method of transport while being able to carry belongings, merchandise and a portable home.

A good public relationship is synonymous with success in business for any company. In this scenario, supermarkets, bixi bicycles, and auto body shops can assist by donating grocery carts, bicycles, raw material and skilled craftsmanship to create a cargo bike.

Using the basket portion of a grocery cart, the rear section of a bixi bicycle steel profiles and sheet metal, a cargo bike is created complete with a fold out sleeping platform for use with the IIT.
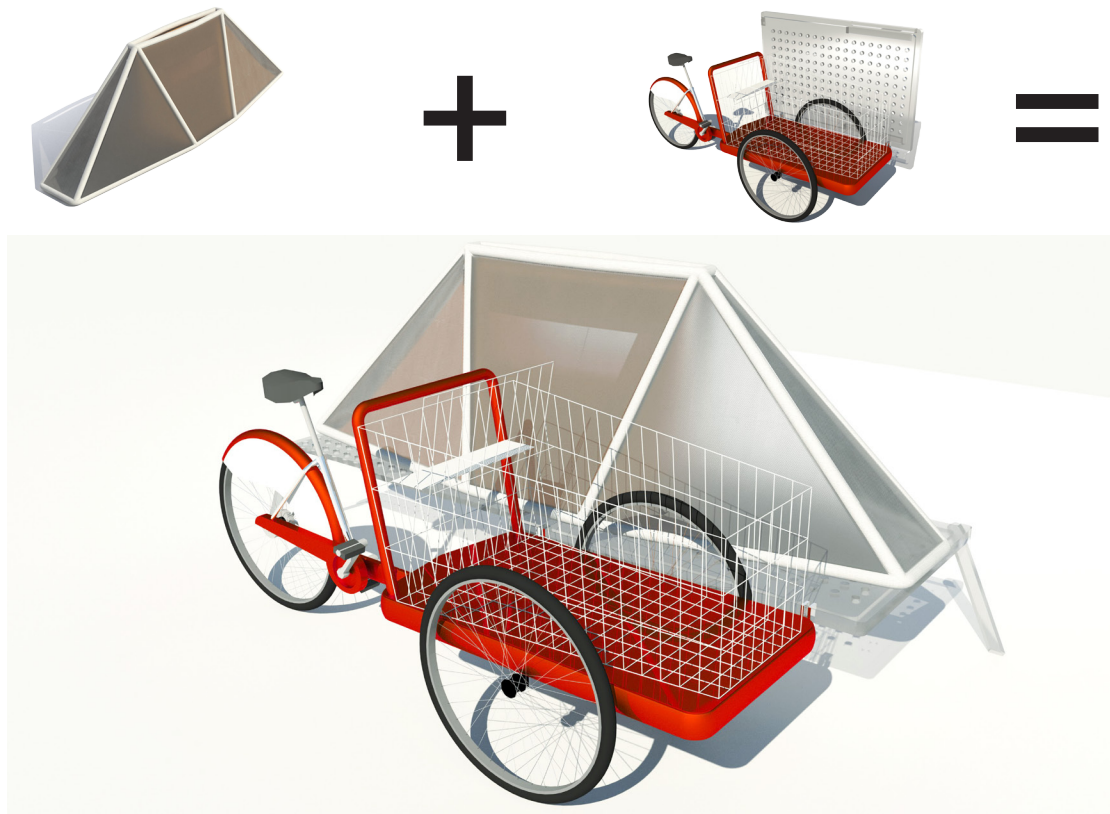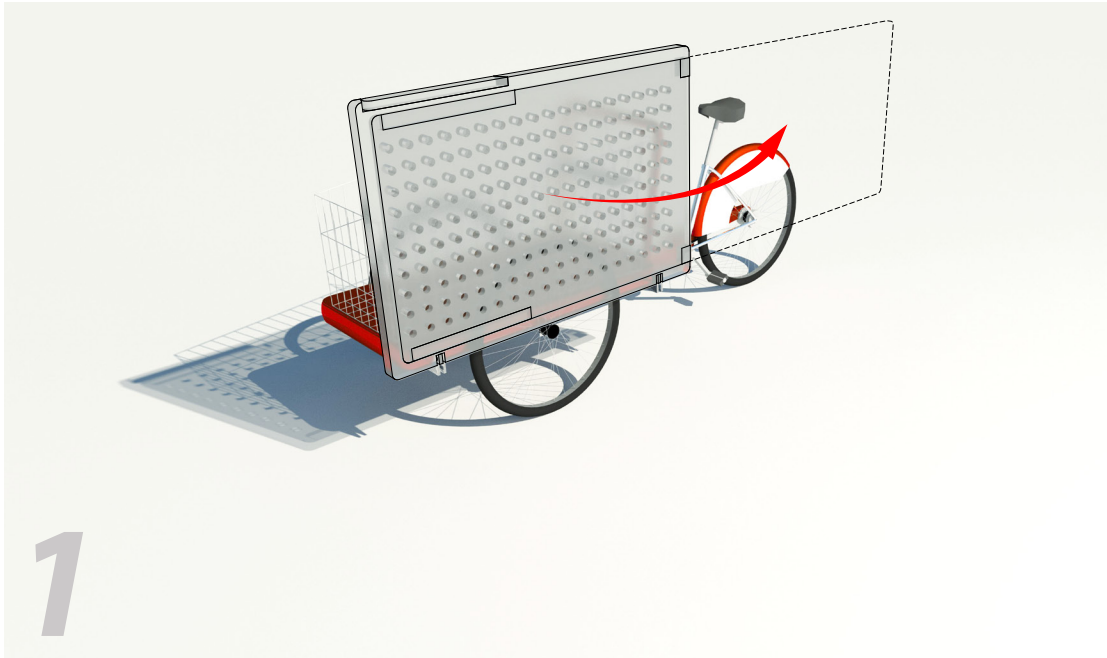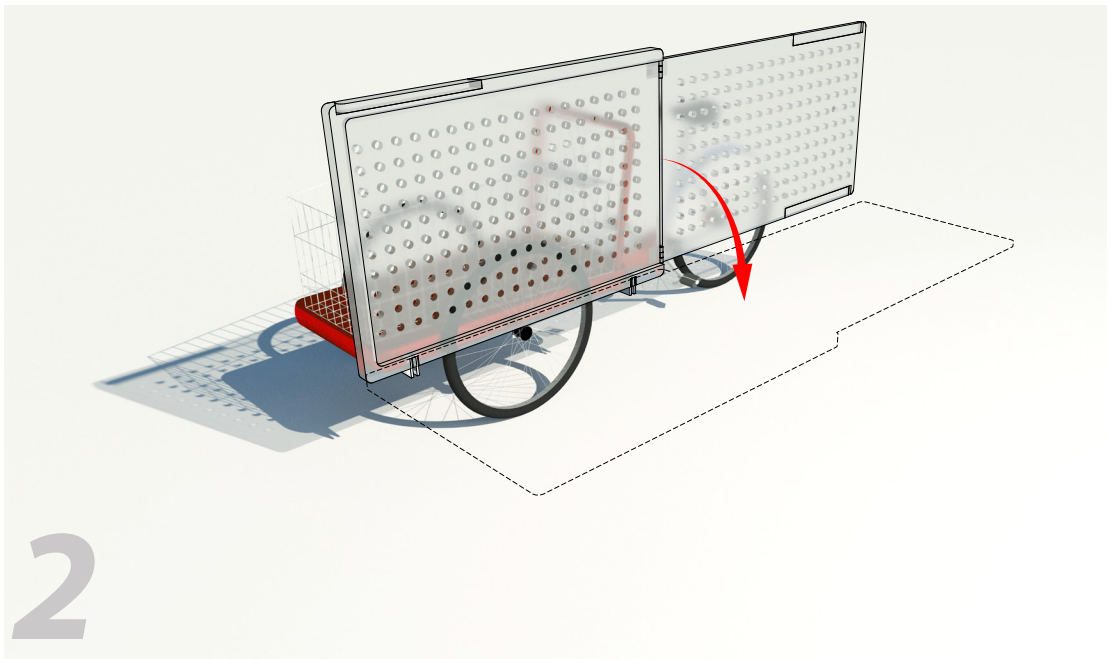
Figure 10.41 (above): sleeping platform on collection bicycle folds open
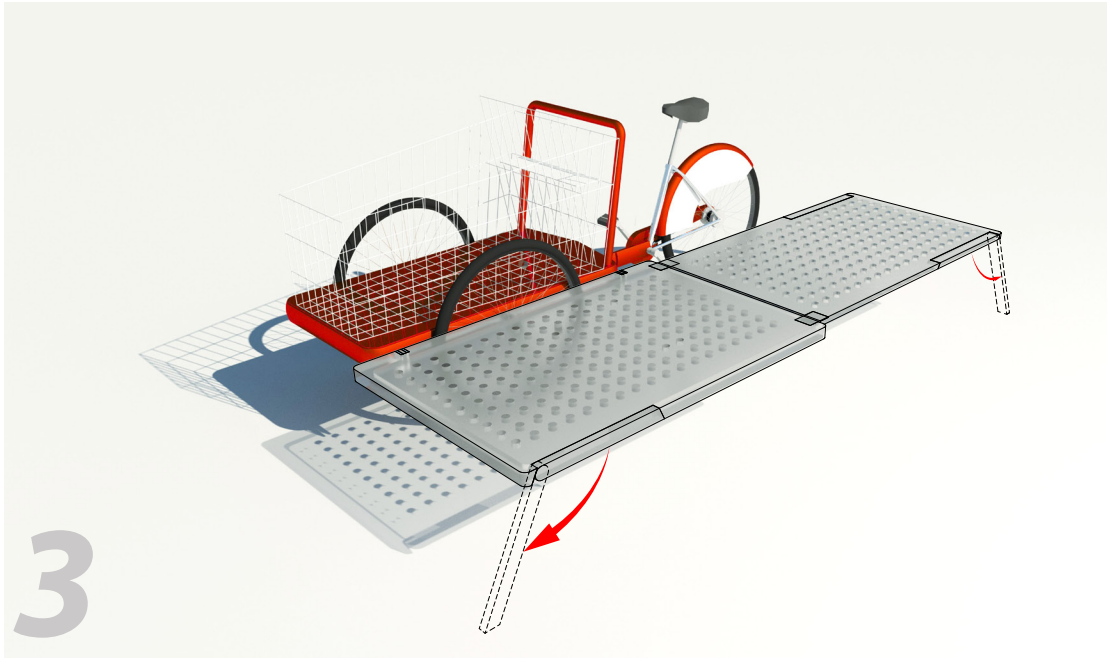Figure 10.42 (below): sleeping platform folds down

3

Figure 10.43 (above): platform legs flip down
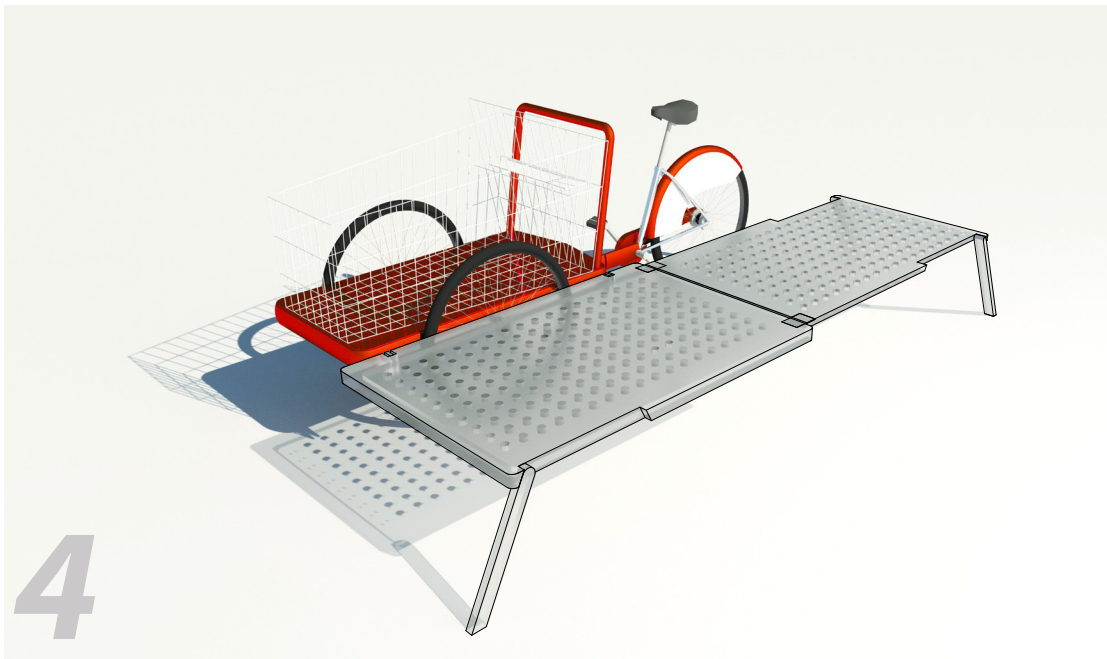Figure 10.44 (below): fully assembled sleeping platform

4

129

5

Figure 10.45 (above): IIT in use with Collection Bicycle
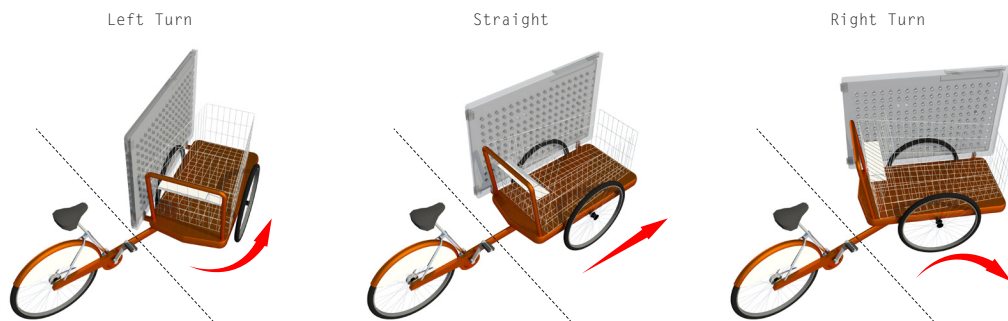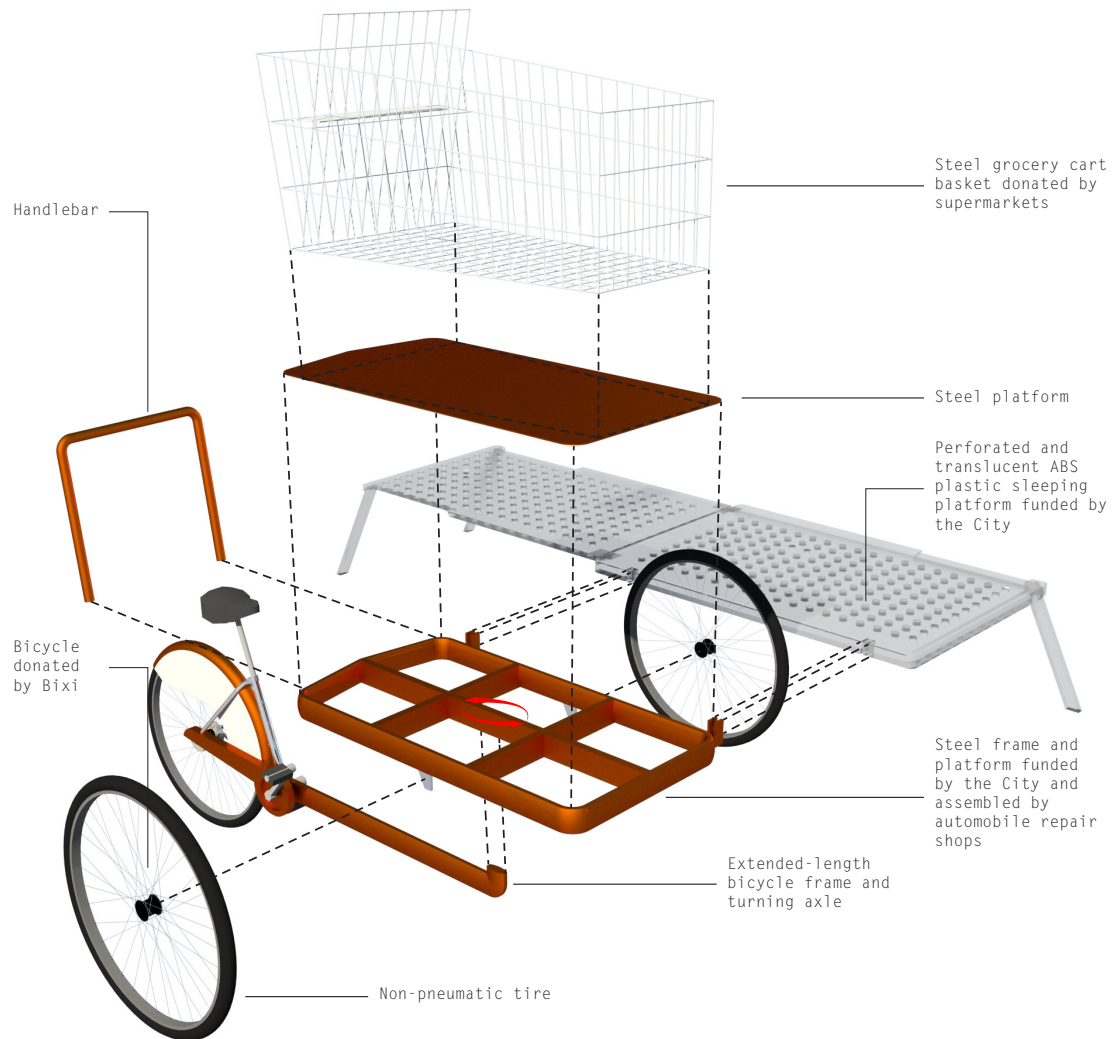Figure 10.46 (below): Collection Bicycle turning about center-of-axis of axle

Left Turn   Straight   Right Turn

Figure 10.47 (above): exploded axonometric of Collection Bicycle construction

Steel grocery cart
basket donated by
supermarkets

Handlebar

Steel platform

Perforated and
translucent ABS
plastic sleeping
platform funded by
the City

Bicycle
donated
by Bixi

Steel frame and
platform funded
by the City and
assembled by
automobile repair
shops

Extended-length
bicycle frame and
turning axle

Non-pneumatic tire

SUMMING UP

Design is an iterative process. The course of events which I call project development includes a non-linear, and often cyclical, procedure of research, analysis, and design permutation that influences our understanding and ideas about a particular subject. Often times, the series of obsolete design work and ideas are forgotten, in praise of the final evolutionary masterpiece. By reflecting on previous iterations of our work, we can better understand and present how design ideas have evolved and influenced the final project.

If each design transformation marks a milestone, then there exist four phases to describe the evolution of Sheltering the Underbelly of Society. The connection between residual spaces and the homeless has always been the heart of the thesis, but the evolution of ideas ultimately affected the methods employed as well as the design of the end-product.

Phase I: Anchoring Freedom

This first phase of design work, undertaken between September and October of 2012, was foundational to developing the connection between the residual and the marginalized. The early understandings of homelessness were based on assumptions from observation and deduction. It was assumed that people who did not live in shelters chose to be outdoors and therefore needed some form of portable shelter. Mobility however is not often associated with architecture because the notion of permanence is what defines and legitimizes it, in the form of a municipal
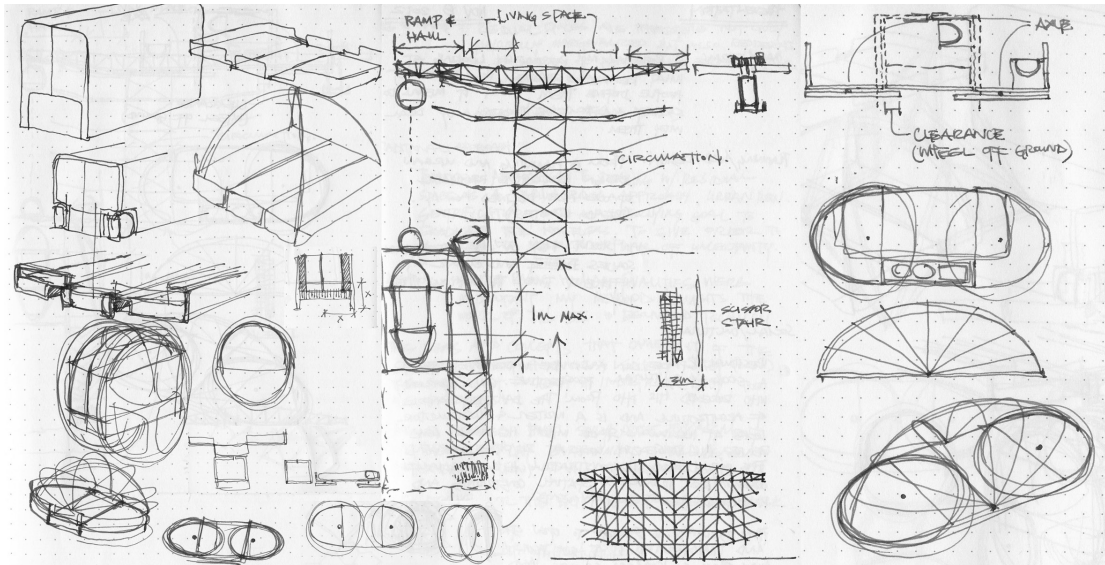
address. Other than our names, an address is the next crucial piece of information that defines us as citizens. It allows us to apply for an identity card, which then opens up a series of opportunities such as healthcare, welfare, disability support benefits, education, employment, and so on.

These ideas culminated into a two-part building type reminiscent of Peter Cook's 1964 Plug-in City. The mainframe was an open-air structure that would be situated in residual spaces between existing buildings, providing the necessities of showers, toilets, electricity, water, HVAC, and of course a municipal address for those registered. The second component of this design existed in the form of portable living pods which would be hoisted up into the mainframe, adopting a plug-and-play scenario. These independent living units can be pushed around the city and transformed into a 1.5 x 3.2 meter sleeping space within a tent enclosure complete with air mattress, dry toilet, three-day's supply of drinking water, and battery power for lighting.

This first iteration provides the homeless with not only an address but also the personal freedom to stay anywhere he or she wishes to be. However, without a strong idea of homelessness and how people chose to live their lives, it was hard to assess the validity of such design.

Figure 11.1 (above): Design sketches of Mainframe & Living Pod
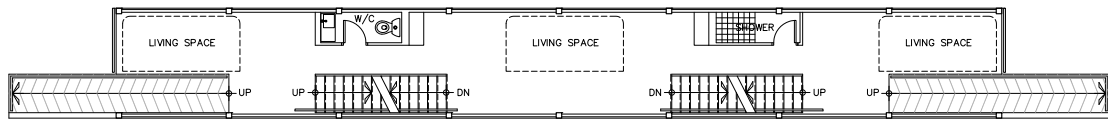
133

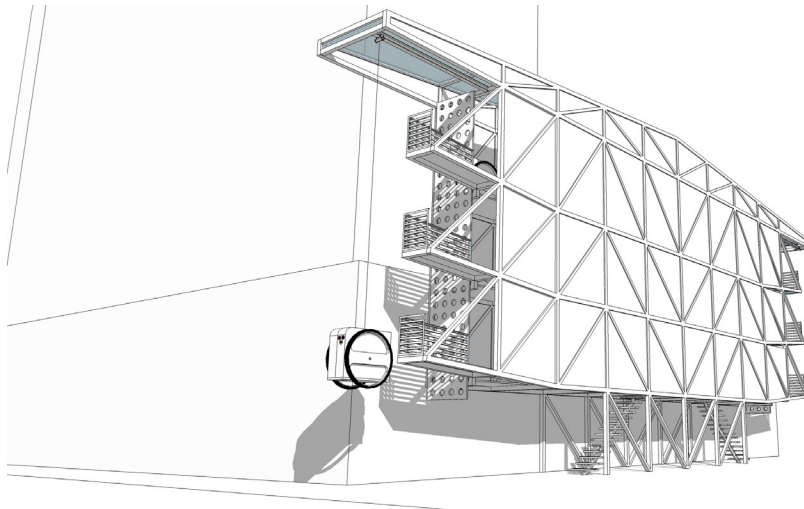Figure 11.2 (above):
Typical floor plan layout

Figure 11.3 (above):
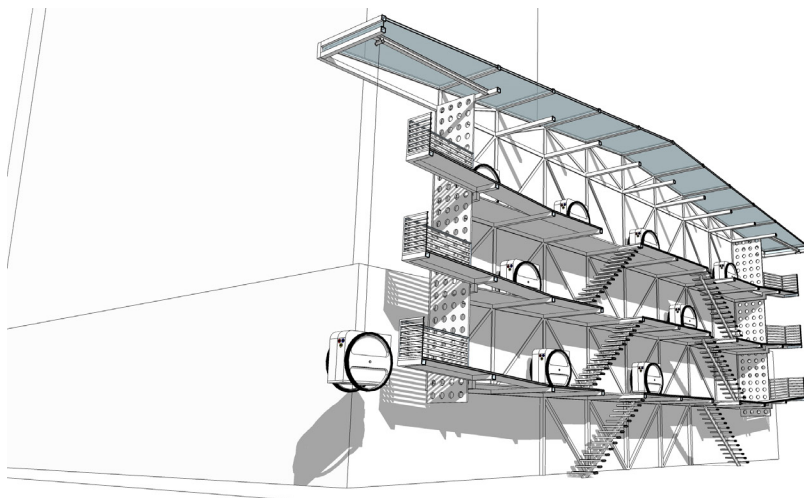Perspective view of Mainframe
hoisting up Living Pod

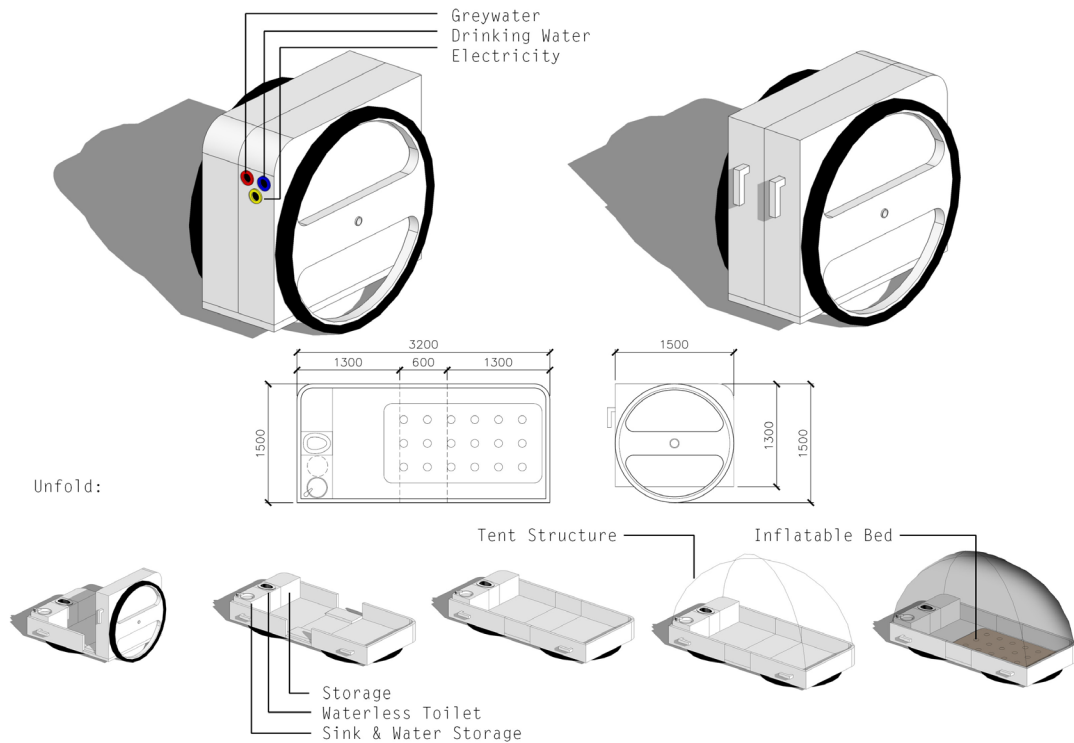

Figure 11.4 (above):
Sectional view of Mainframe

Greywater
Drinking Water
Electricity

Unfold:

3200
1300   600   1300
1500

1500
1300   1500

Tent Structure   Inflatable Bed

Storage
Waterless Toilet
Sink & Water Storage

Figure 11.5 (above):
Design of Living Pod

Phase II: Fragmentation

Phase two, carried out between November and December 2012, was
the beginning of a change in design direction. During this time, the
commencement of research on homelessness in Toronto began. It
confirmed the initial assumptions that people do choose to be living rough
because they feel independent while others didn't enjoy the institutional
environment because of the strict rules, preconditions to use, and conflict
with other users.

The undesirable condition of physical proximity to other users and the
penchant for independence required the dismantling of the narrow and
vertical mainframe into one that is horizontal. A horizontal mainframe allows
one to distance him or herself from those who are seen as a threat while
maintaining its original functions. The idea of employment was reinforced

Concept
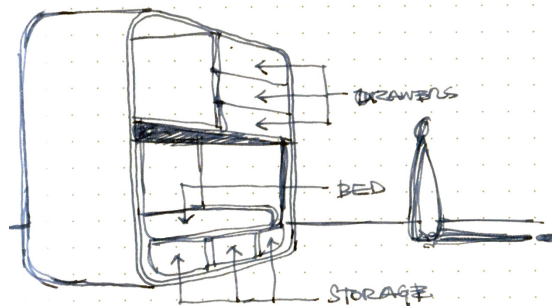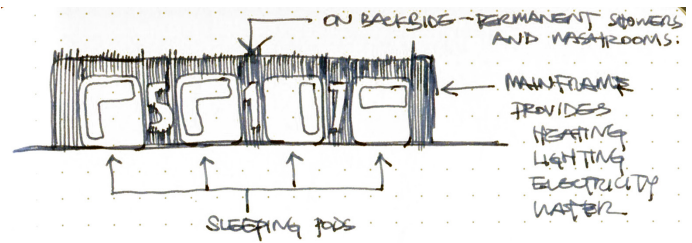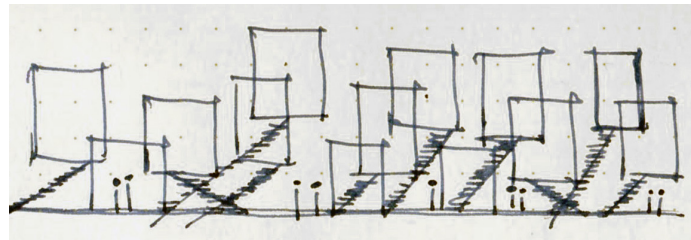
Mobile
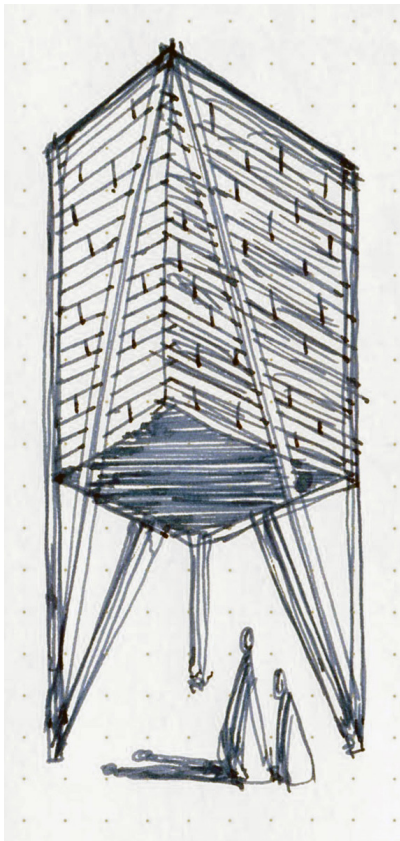Living Units

Mainframe

Community

ON BACKSIDE - PERMANENT SHOWERS AND WASHROOMS.

MAINFRAME PROVIDES HEATING LIGHTING ELECTRICITY WATER

SLEEPING PODS
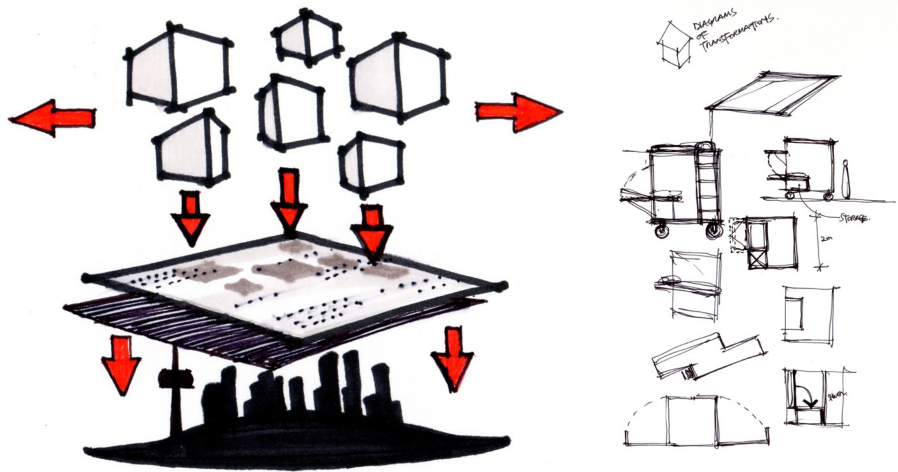
DRAWERS

BED

STORAGE

*Figure 11.6 (above & opposite):
Design sketches of
personal living units*

136

by relocating the mainframe adjacent to the John Innes Community Centre beside Moss Park; the city was to become the starting point to help the homeless regain their financial independence.

Portable living pods were no longer as portable, they were larger and heavier cube houses on wheels. Reducing the mainframe to an elevated horizontal surface meant that living spaces had to be more substantial in weather protection and amenities such as showers, toilets, and water supply which now all had to be contained within it.

Assessing this scheme, the larger units seemed more of an inconvenience to the general public as well as the people living inside. They were too large and heavy to be maneuvered around the city, which in reality would probably end up permanently locked to a certain location. The level of comfort, being similar to that of a mini house, was also of concern. Homelessness, whether outdoors or indoors, is a temporary condition, but because of the higher level of comfort provided by these shelters, it may be counterproductive.
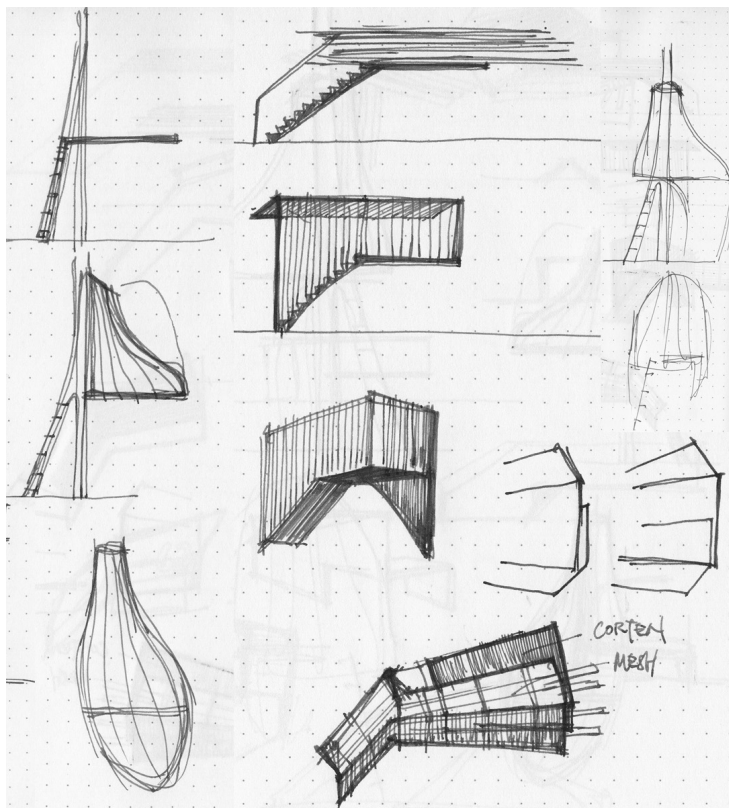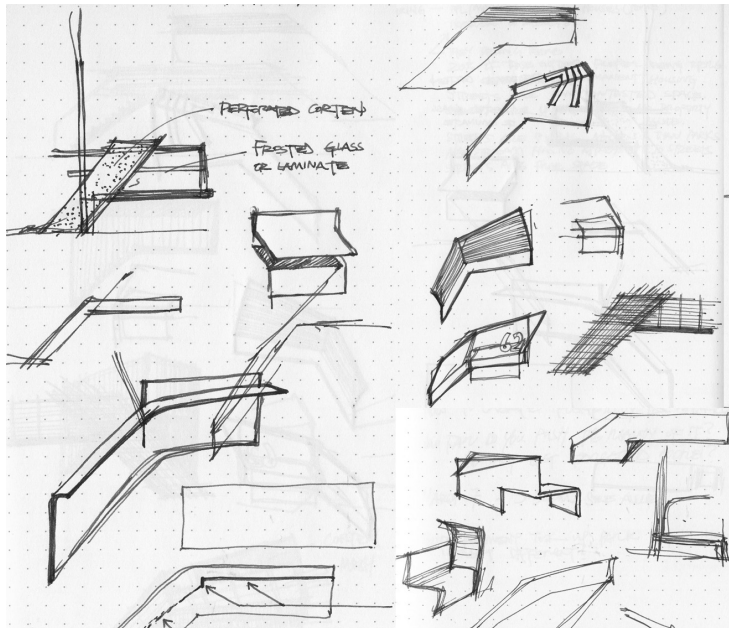
Text within the sketches:
PERFORATED CORTEN
FROSTED GLASS OR LAMINATE
CORTEN MESH
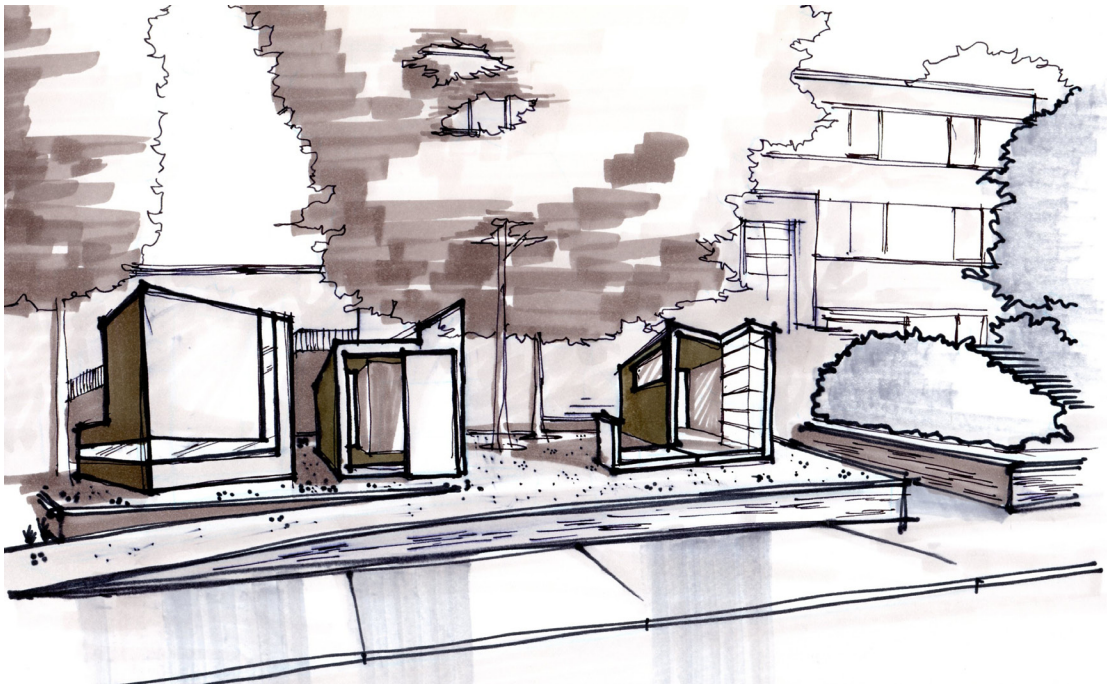
*Figure 11.7 (top & left):
Design sketches of
Light Post House*

Phase III: Light Post House (LPH)

Upon further research on the psychology of homeless, and the reading of non-reformist concepts of Harvey, Lefebvre, MacDonald, Godsell, Loukaitou-Sideris, and Ehrenfeucht, a different method was employed. The previous two schemes were found to be still too prescriptive and institutional. What began as a flexible group living design, became more independent but still relied on a central location. If we were to fully embrace a non-reformist approach, it had to respect how people lived, where they lived, their values and what their basic needs were. The previous schemes still imposed values on people, forcing them to live with people who they don't necessarily want to be with, the encouragement of employment, and the fixation to an address. Part of the freedom that one has, living in residual spaces however, is the ability to be under the radar should they choose to.
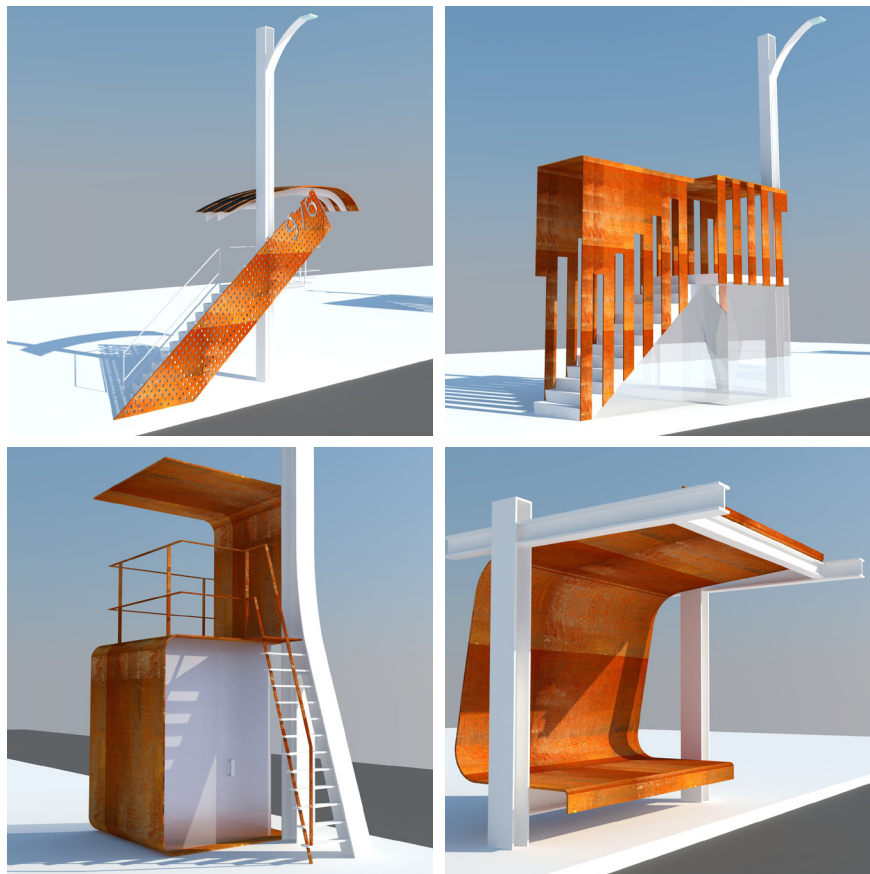

Figure 11.8 (right): Permutations of Light Post House

The understanding of residual spaces expanded from the physical conditions between urban forms to any public space that may become residual throughout the day. Sidewalks, parks, and storefronts fall into that category at night and in some cases even during the day. These urban conditions are also native to the lifestyle of the outdoor homeless. This is where they prefer because of what these spaces offer – pedestrian flow for security and panhandling opportunities, shading from trees, park benches to sleep on, storefronts from shelter, and exhaust grates for warmth.

The idea of a mainframe and municipal address remained consistent however it has been further broken down and fragmented into single occupancy structures without an ownership structure, it was to be on a first-come-first-serve basis. If residual spaces were their haven, then the idea of the Light Post House was an improved version of that, spread out all over the city. One can be given and assigned an address at a specific light post, adopting half street-numbers, where that individual would be able to receive letters in a locked mail box but not have to be physically residing there.

Nomadic architecture and their temporary condition were conceptually analogous to the homeless and influenced the way the architecture was to be constructed. The change in the homeless population meant that
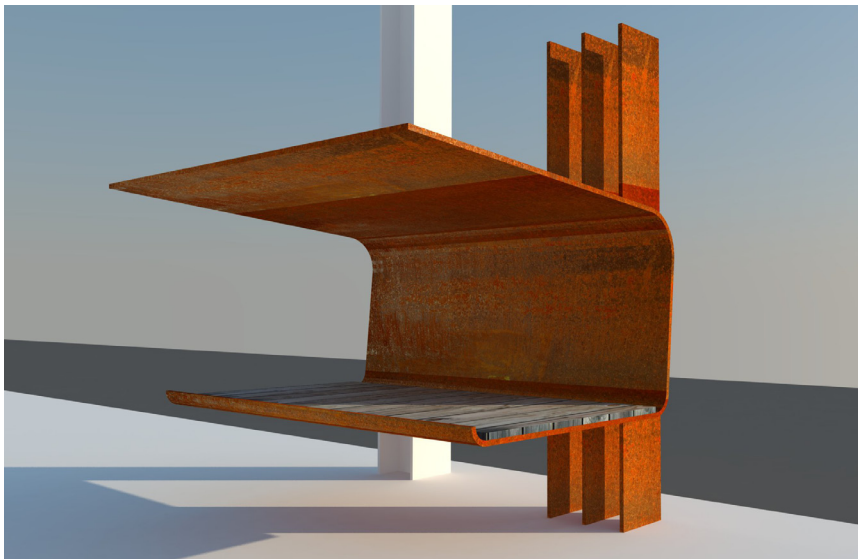

Figure 11.9 (left): Bench option of Light Post House

the architecture at times had to be able to shrink or expand with those fluctuations. This was achieved through a kit-of-parts, modular structures which relied on light posts so ubiquitous in the urban environment and readily available to be tapped into.

Light Post House was elevated above the ground for two main reasons. The first was to provide safety and security from assaults, snow plows, splashes from vehicles driving by, etc. The second reason to elevate the shelter was to minimize impact on pedestrians and street level businesses, yet low enough to not block the views of offices or residential apartment above. Its presence in the public realm also meant that it needed to provide more than just shelter; it had to provide for others because after all public space is for everyone. The design of various amenities was considered as part of a civic improvement project, by providing various street furniture and services to better assist pedestrians.

The strength of the work lies in its non-judgemental approach, offering its users an independent shelter facility with a de-institutionalized sense of freedom. The kit-of-parts construction offers the city the flexibility to increase or decrease the number of shelters within twenty-four hours, unlike a building.
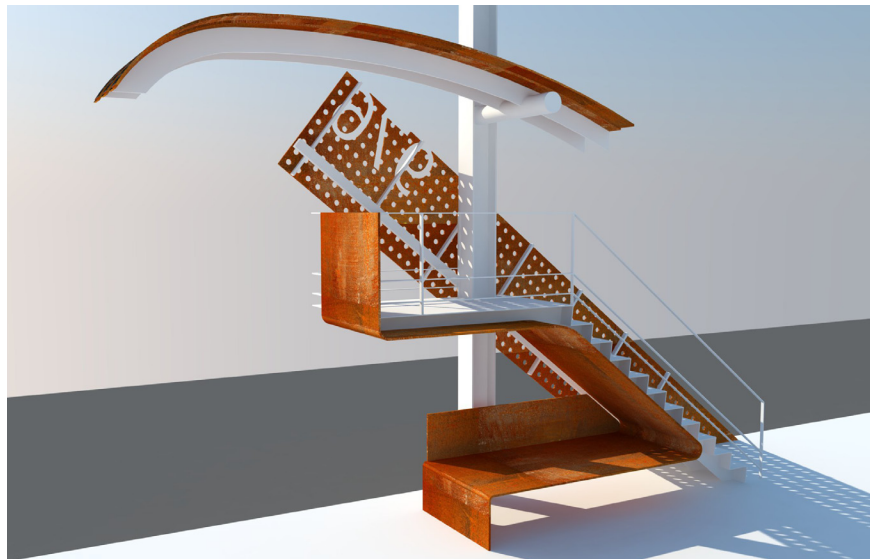
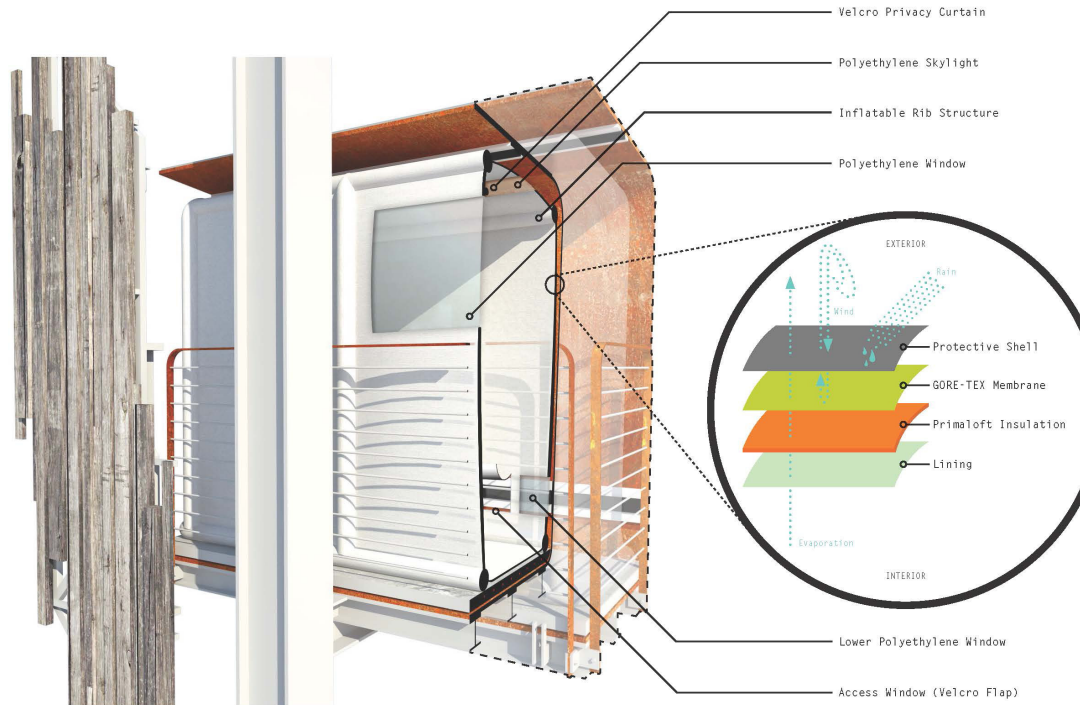Figure 11.10 (right): Permutation of Light Post House

141

The level of exposure and enclosure were two concerns that were brought up during the final presentation. Exposure was of concern because some felt that the homeless perched on top puts them on public display and objectifies or dehumanizes them. From the perspective of the homeless and written about by Rakowitz, Loukaitou-Sideris, Ehrenfeucht, and Kohn, exposure was used as a form of protest. The act of being visible declares one's existence; it defies certain stigmas that say homelessness should be hidden away because it's shameful. It is a form of resistance, in this case of institutionalization being the only form of solution for the homeless, and public display helps to educate people on their condition and puts one in a "better position to demand what they need" (Kohn, 2004, pp. 167-188) (Loukaitou-Sideris & Ehrenfeucht, 2009, p. 187). Exposure was used as an agency of change.

The level of enclosure of LPH was kept very open for several reasons, the first being exposure as described above. The openness of the platform structure was influenced by inhabitants of StreetCities. In the book StreetCities: Rehousing the Homeless, it was described that some users of this facility suffered from post-traumatic stress which triggered their fear of enclosed spaces. The idea of four walls and a closed door bothered them, they preferred to live on the sofas in corridors where they could be seen and heard. Many outdoor homeless people may have had the same experiences, and it is possible that they choose to be in more open spaces. This population are also accustomed to openness, it is something they already subscribe to, it would be no different than living on the sidewalk in terms of openness, but it would be very different if we were to impose unwanted enclosure for them.
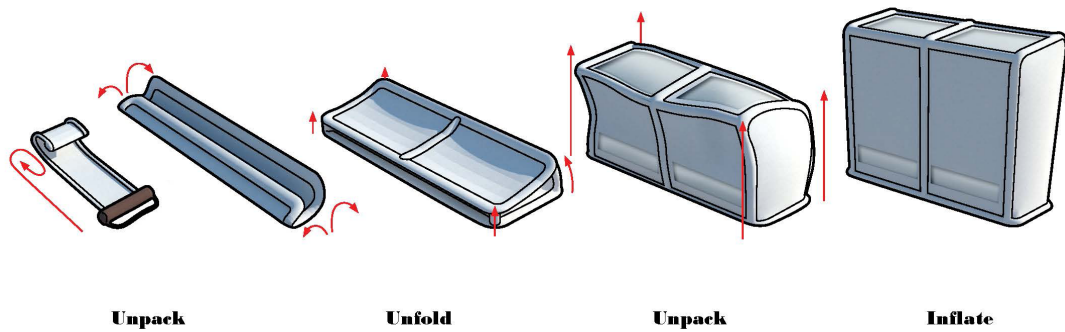
Figure 11.11 (opposite top): Construction of iteration no. 1 inflatable tent

Figure 11.12 (opposite bottom): Inflation/storage process of iteration no. 1 inflatable tent
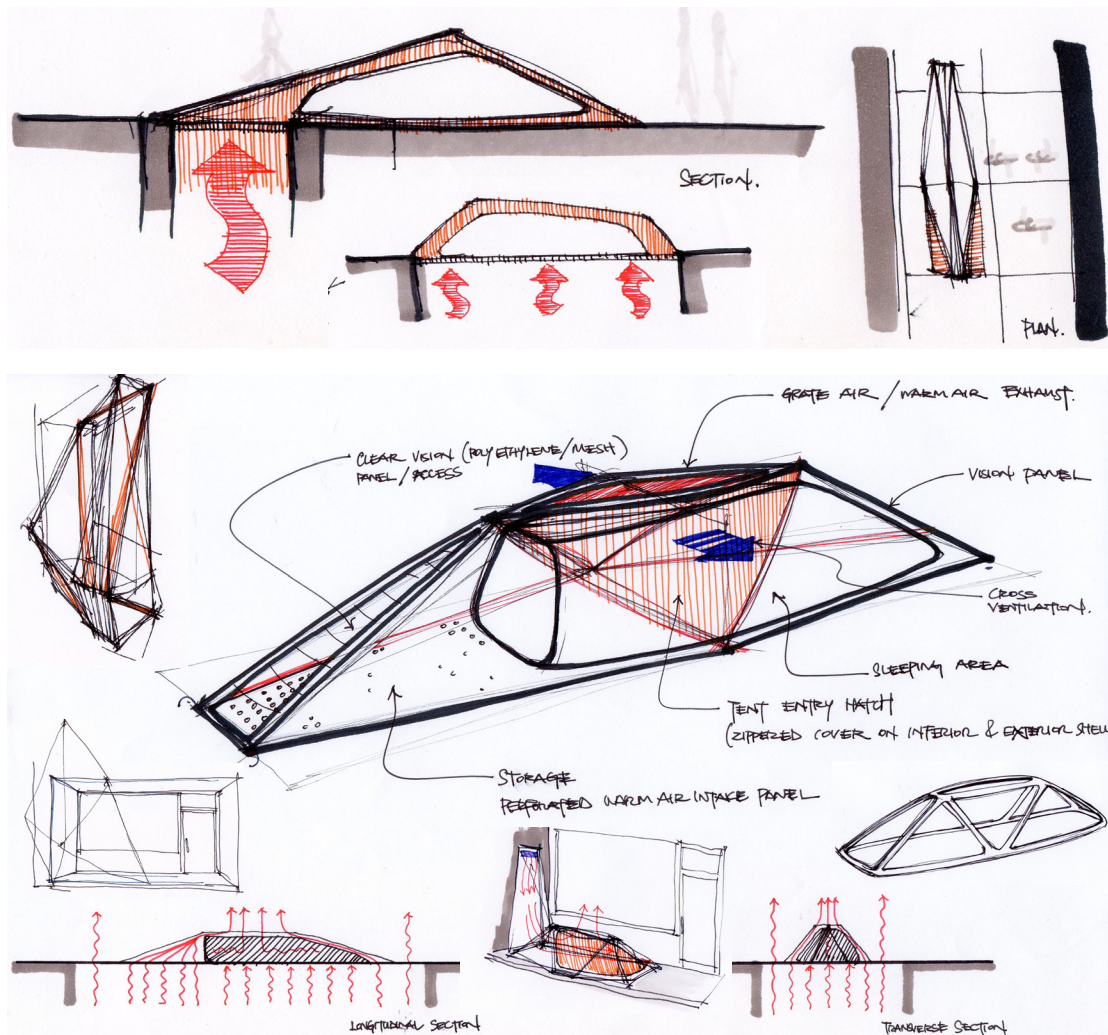
Inflatable Tent Construction

Velcro Privacy Curtain

Polyethylene Skylight

Inflatable Rib Structure

Polyethylene Window

EXTERIOR

Rain

Wind

Protective Shell

GORE-TEX Membrane

Primaloft Insulation

Lining

Evaporation

INTERIOR

Lower Polyethylene Window

Access Window (Velcro Flap)

Tent Inflation & Storage

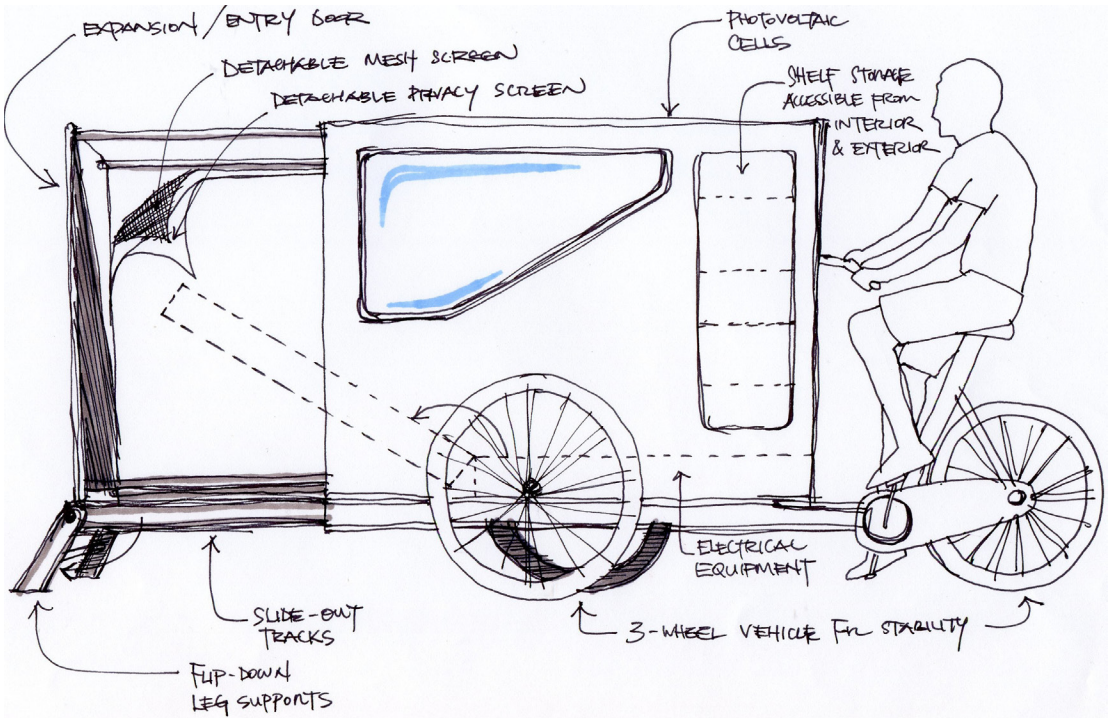**Unpack**   **Unfold**   **Unpack**   **Inflate**
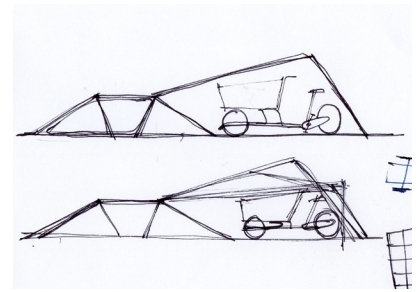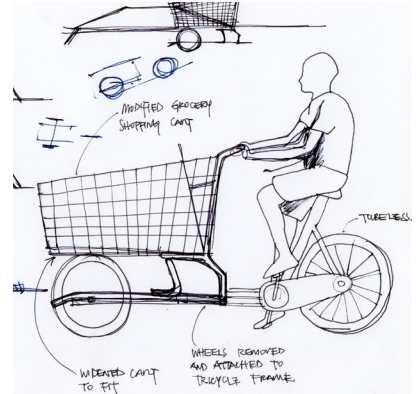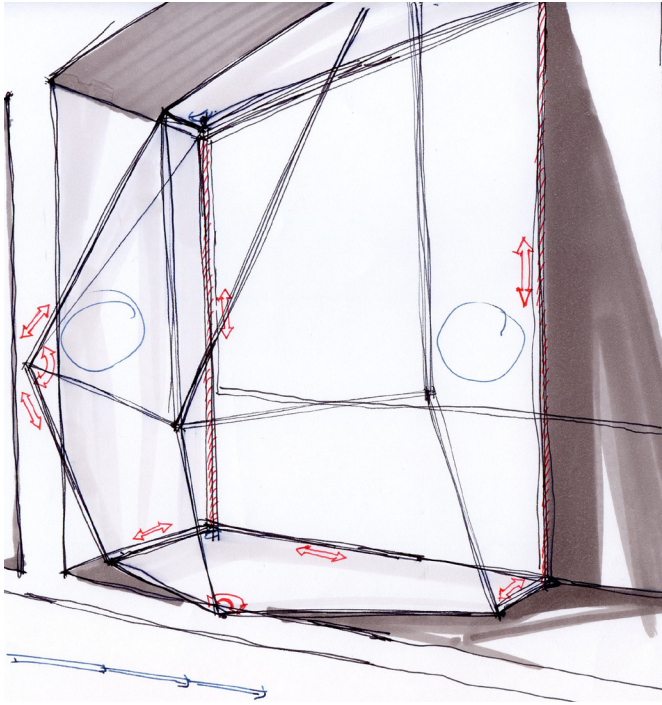
143

Phase IV: LPH+IIT+CB

LPH provided freedom in the form of an unregulated structure; however it wasn't mobile which forced users to always travel back to where a shelter would be available. The complexity and diversity of homelessness meant that there are different views, desires and needs. Some preferred to be alone or would only reside in certain locations. This was when more mobile structures were introduced to the project to be used as a separate entity or in conjunction with LPH. The tent and collection bicycle allowed users to make better use of streets and parks as a means to comfort and survival.

Figure 11.13 (below & opposite): Development sketches of tent and bicycle

144

MODIFIED GROCERY SHOPPING CART

WIDENED CART TO FIT

WHEELS REMOVED AND ATTACHED TO TRICYCLE FRAME.

TIRELESS.

EXPANSION/ENTRY DOOR

DETACHABLE MESH SCREEN

DETACHABLE PRIVACY SCREEN

PHOTOVOLTAIC CELLS

SHELF STORAGE ACCESSIBLE FROM INTERIOR & EXTERIOR

SLIDE-OUT TRACKS

FLIP-DOWN LEG SUPPORTS

ELECTRICAL EQUIPMENT

3-WHEEL VEHICLE FOR STABILITY

145

Project Feasibility

For a project like this to be realized, a major hurdle to overcome is the reformist attitude towards homelessness that society at large needs to address. The city and some of its inhabitants dislike the visibility of the homeless on streets; they would rather hide them from plain sight in an institutional shelter or some sort of permanent housing. Homelessness' stigma as a form of human failure or the failure of society to properly house its citizens when exhibited reflects the success of that society. This attitude for image and status at the expense of one's living condition needs to change before any alternative solutions can be realized. By changing attitude, the challenge of using taxpayer's money to realize such a proposal is also minimized.

Another hurdle is in relation to the legalities of such a structure. When MacDonald proposed 500 shelters throughout San Francisco, the city banned the idea because "there's no running water, no toilet facilities. It absolutely meets no code" (New York Times, 1987). In other words, it does not fall under what is legally considered 'a dwelling'. The fact is, it isn't a house, and it shouldn't be classified as one either.

Another hurdle may be the liability the city faces for those living on and walking under such a structure. This is barely an issue however, because there are so many things that can be a liability in the public environment. A well-engineered and maintained structure – like bridges, manholes, and light posts – is crucial for the safety of the general public. Many of West 8, urban design and landscape architecture firm's designs also appear to be a public safety hazard such as the wavedeck at Toronto's waterfront or the Borneo-Sporenburg Bridges in Amsterdam.

Ultimately as a society, it should be our highest priority to break down these barriers, in support of those who have temporarily fallen through the cracks.
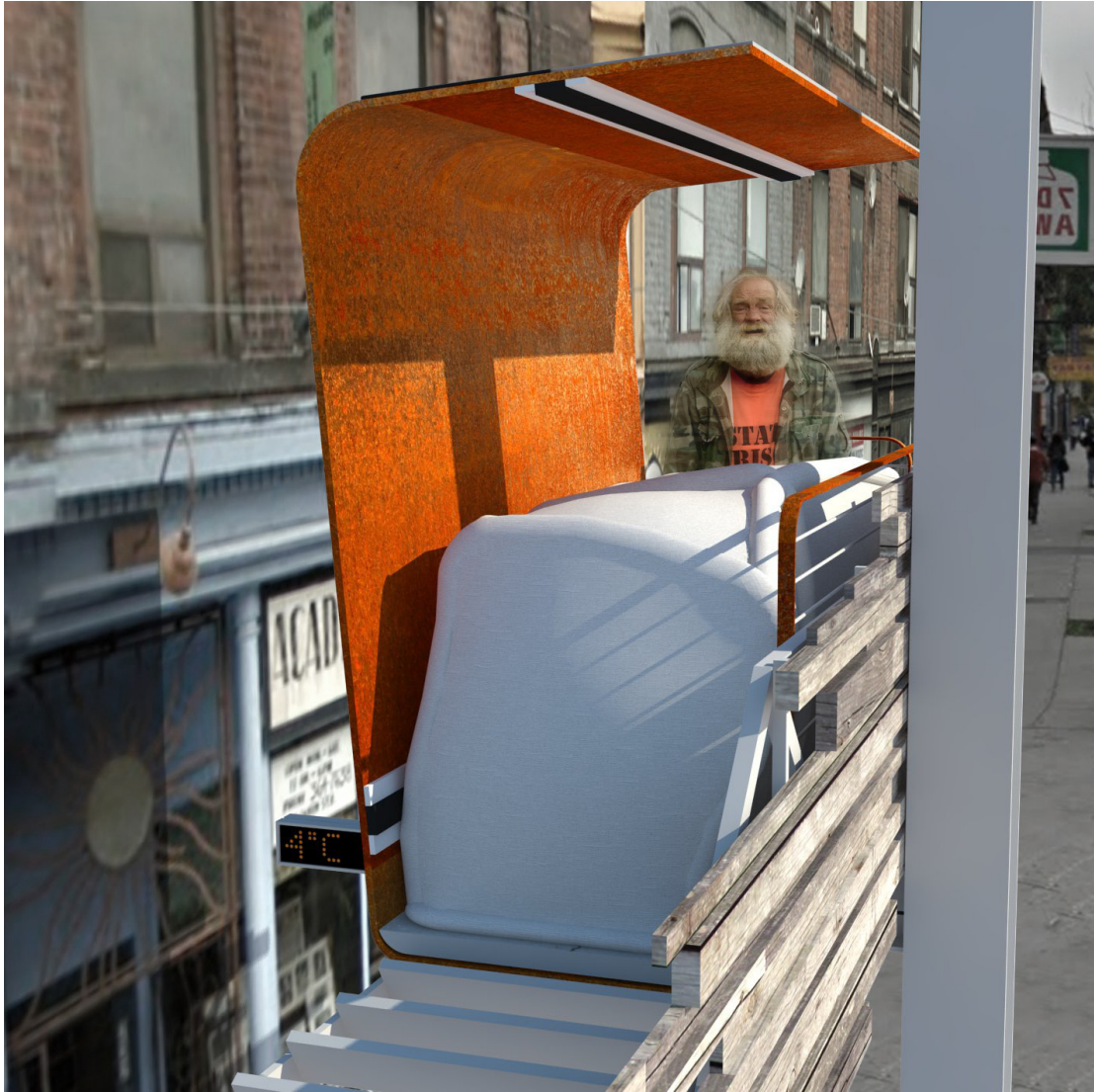
Figure 11.14 (above):
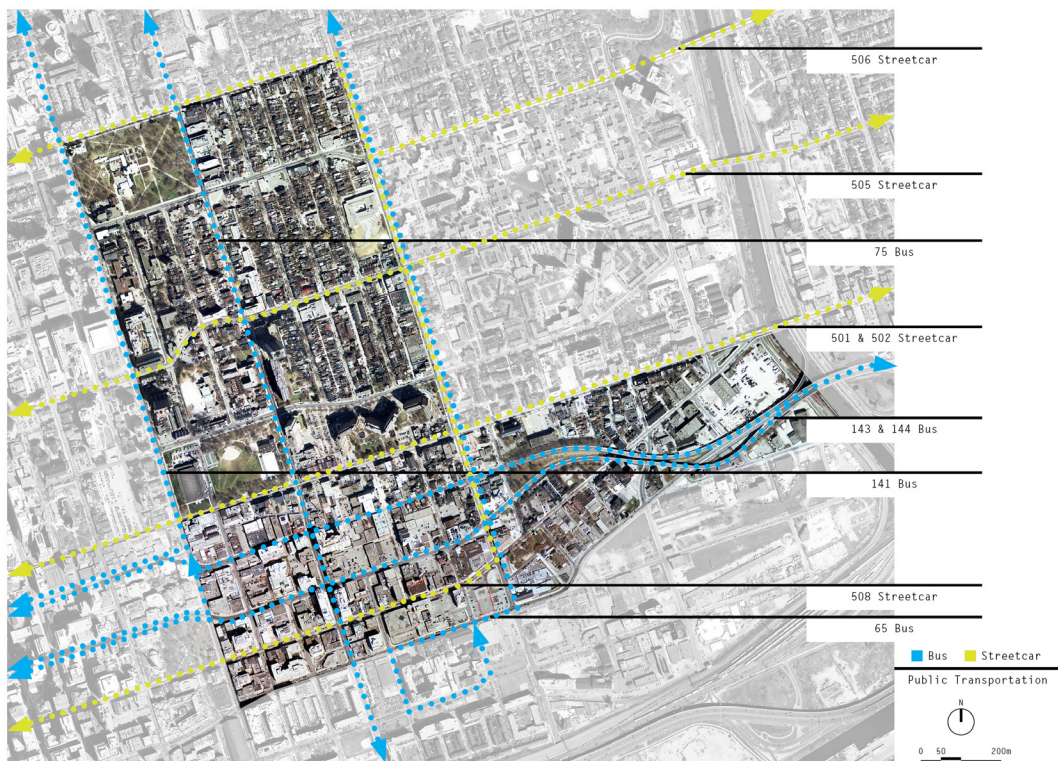Iteration no. 1 rendering
of LPH and tent in use

147

APPENDICES
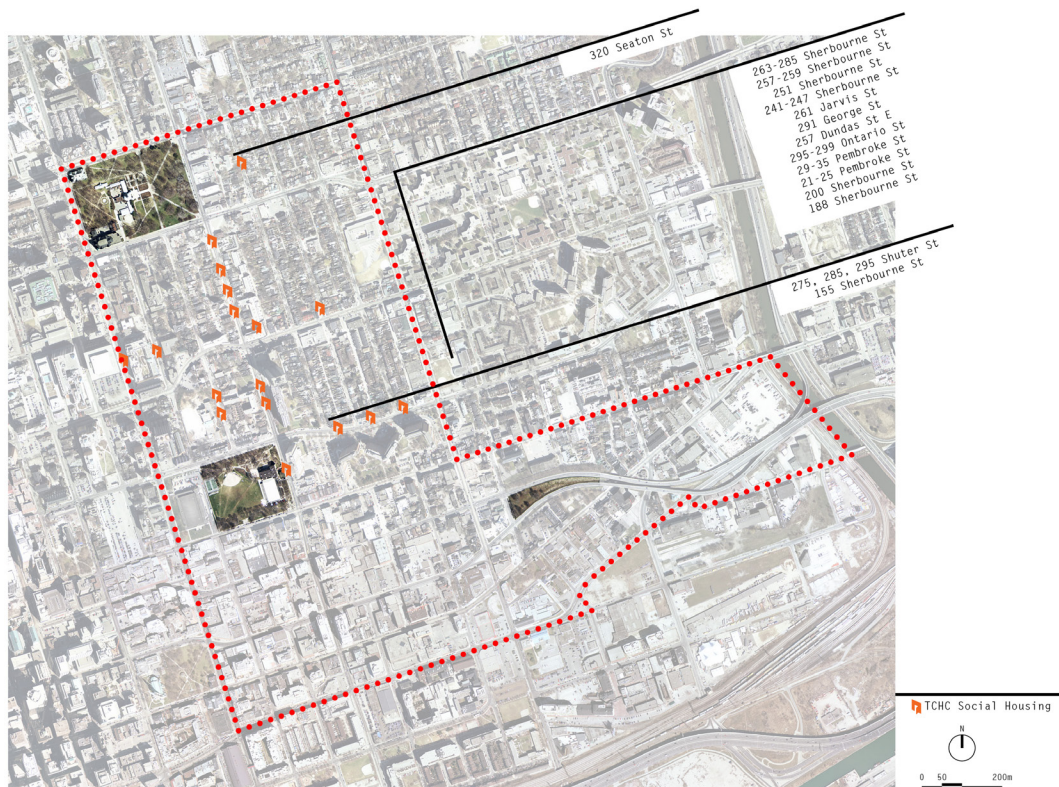
APPENDIX A: ADDITIONAL SITE INFORMATION

506 Streetcar

505 Streetcar

75 Bus

501 & 502 Streetcar

143 & 144 Bus

141 Bus

508 Streetcar

65 Bus

■ Bus ■ Streetcar
Public Transportation

N

0   50   200m

Allan Gardens

Moss Park

Orphan's Green

Public Park Space

N

0   50   200m

150

320 Seaton St

263-285 Sherbourne St
257-259 Sherbourne St
251 Sherbourne St
241-247 Jarvis St
261 Jarvis St
291 George St
257 Dundas St E
295-299 Ontario St
29-35 Pembroke St
21-25 Pembroke St
200 Sherbourne St
188 Sherbourne St

275, 285, 295 Shuter St
155 Sherbourne St

TCHC Social Housing

N

0   50   200m

APPENDIX B: SCALED DRAWINGS

Front Elevation
Scale: 1:50

Plan
Scale: 1:50

+3.20   13R   +0.00
                         UP
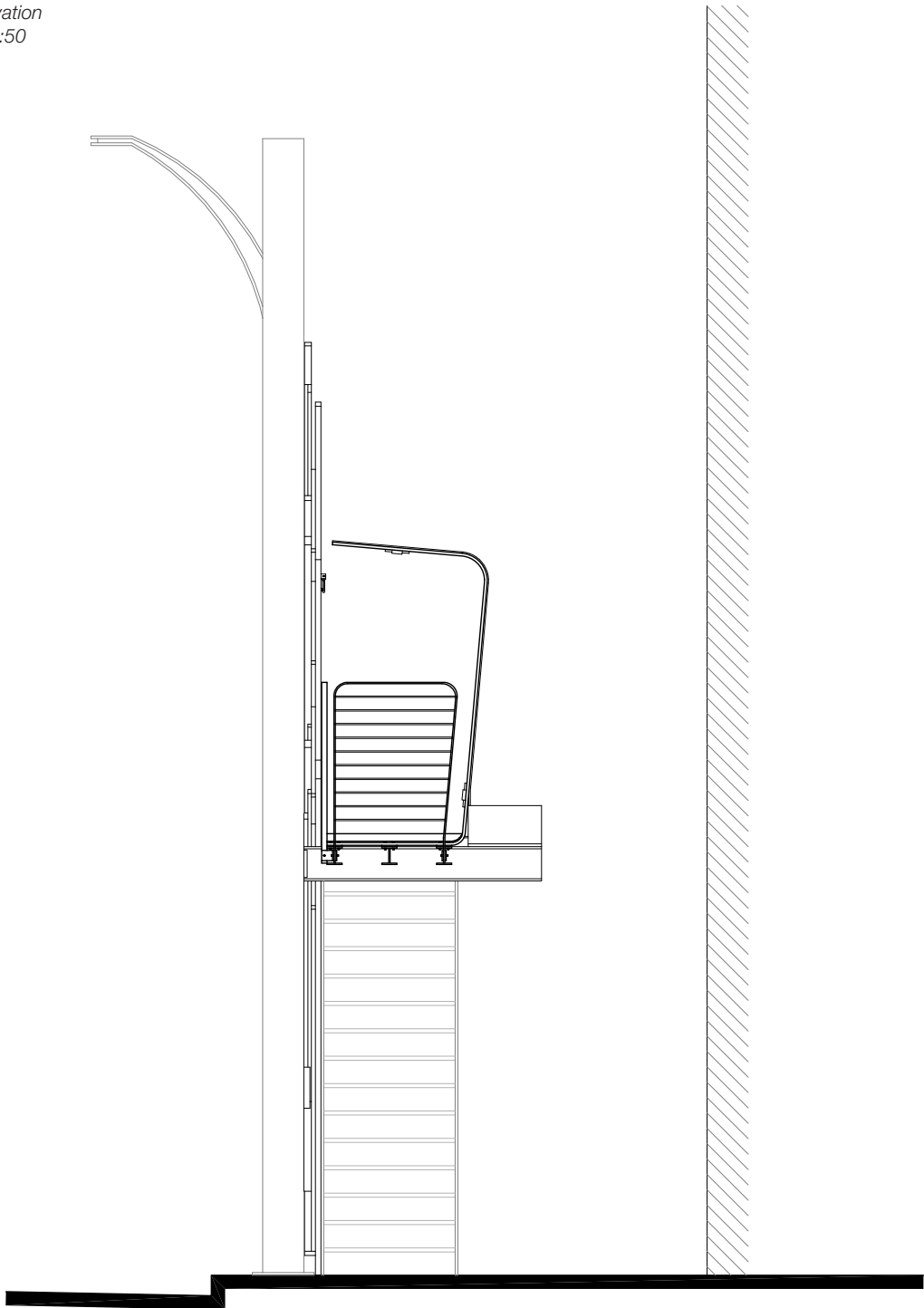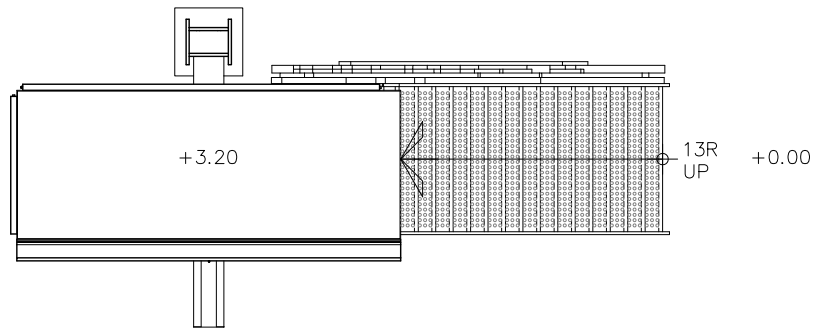
Stair Rotation Diagram
Scale: 1:100
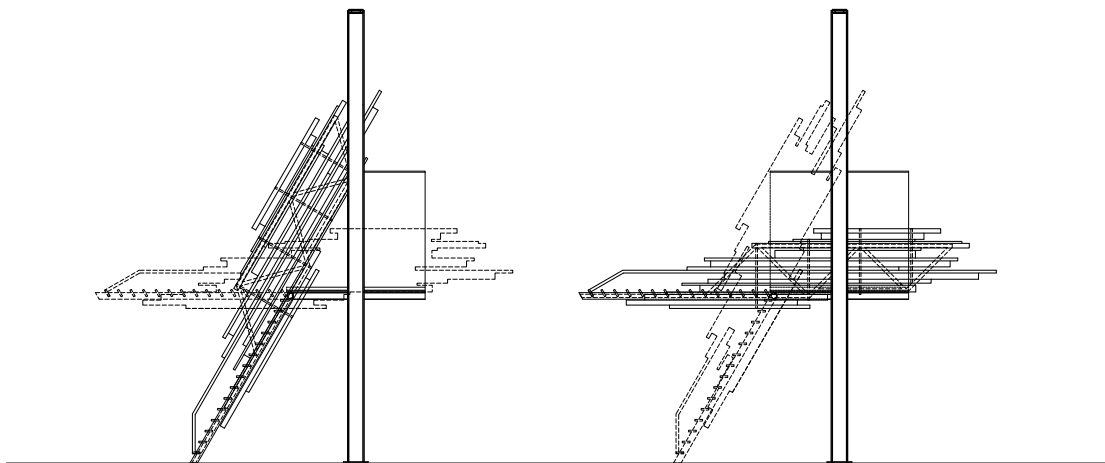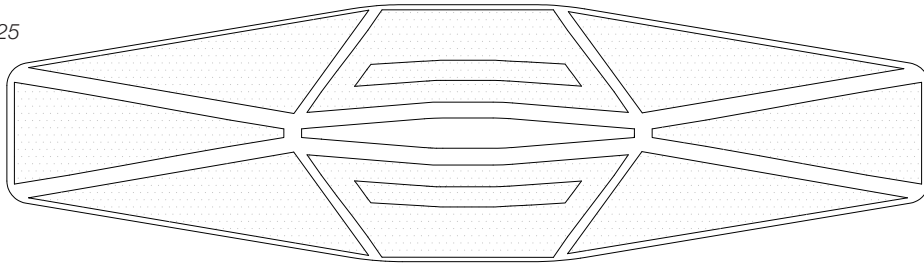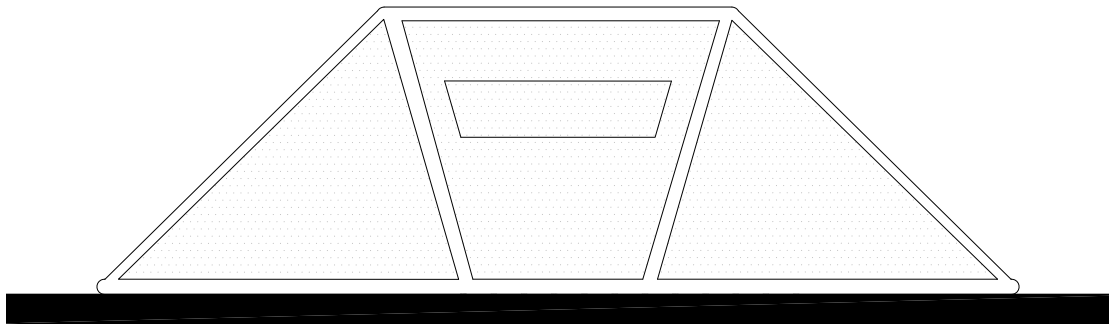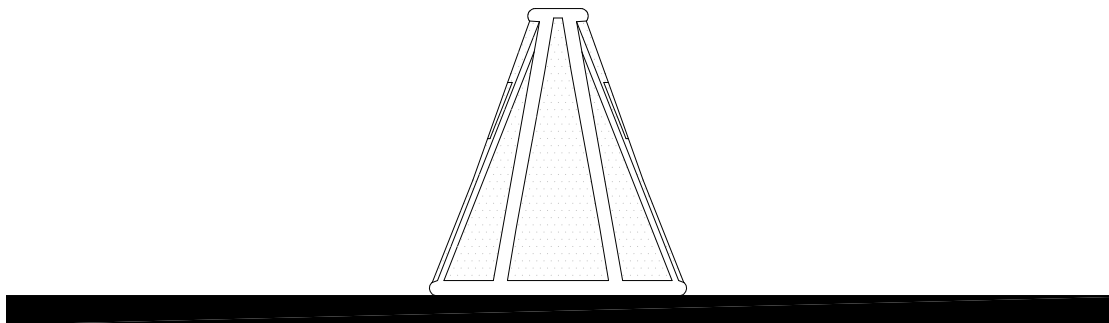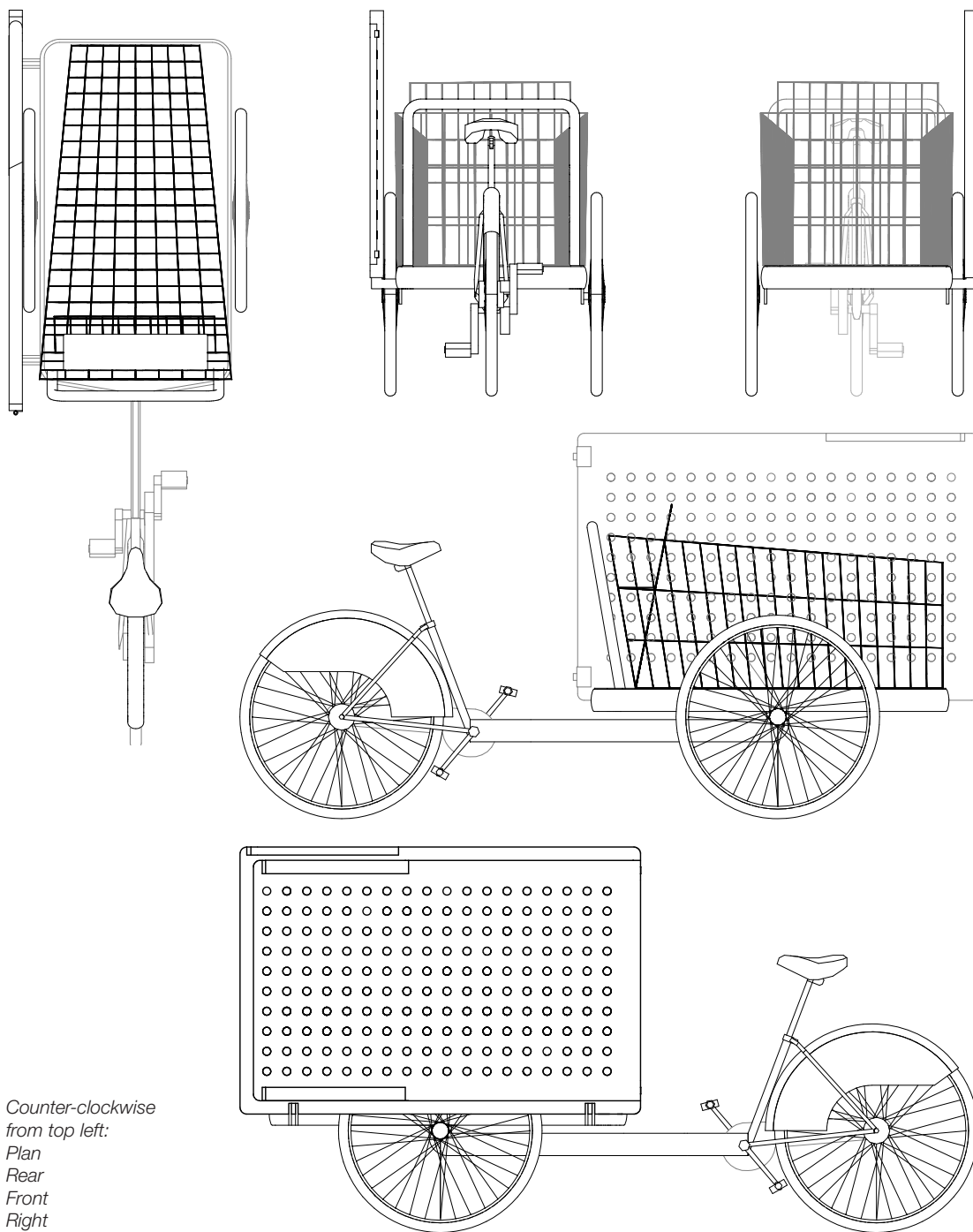
*Counter-clockwise
from top left:
Plan
Rear
Front
Right
Left
Scale: 1:25*

158

APPENDIX C: MODEL PHOTOS
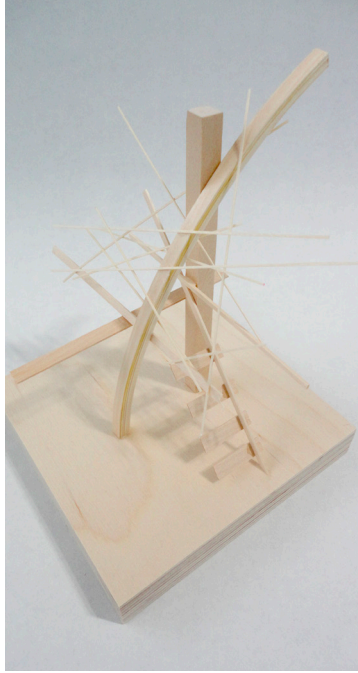
APPENDIX D: HOMELESSNESS RESEARCH SEMINAR POSTER

The City Institute and the Canadian Homelessness Research Network present:

The City Seminar

An interdisciplinary series of presentations and discussions on urban landscapes, past and present.

Homelessness Research

Join us for a snapshot of what's new in homelessness research and how that research may be used to inform and support decisions that contribute to solutions.

At Home/*Chez Soi:* Early Outcome Findings

Paula Goering
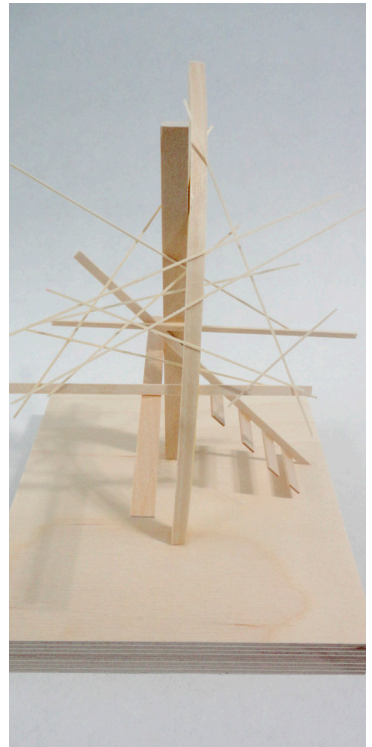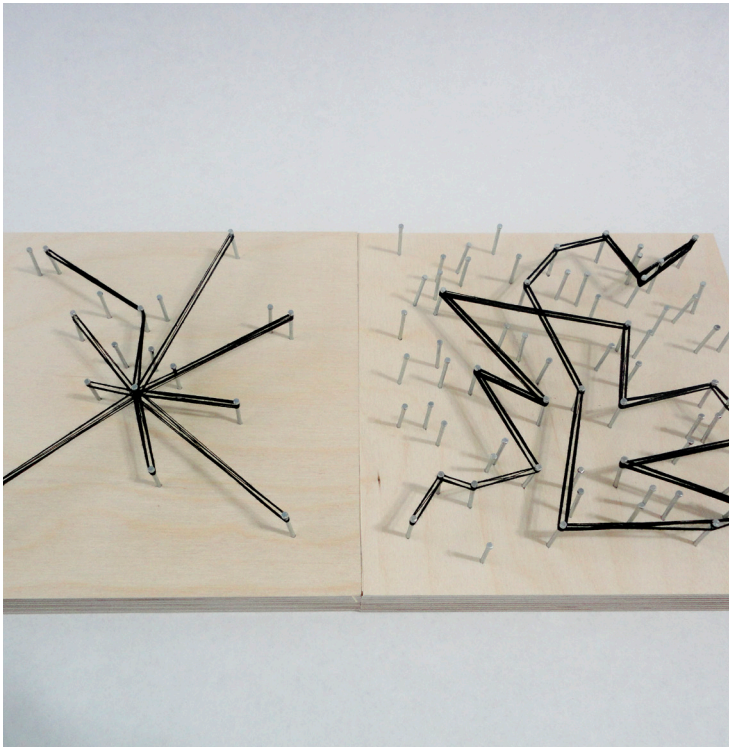Affiliate Scientist, Dept. of Social & Epidemiology Research Centre for Addiction & Mental Health

Research Lead, At Home/*Chez Soi*, Mental Health Commission of Canada

Transitions from youth homelessness: What does the Foyer model offer Canada?

Stephen Gaetz
Associate Professor, Faculty of Education, York University

Director, Canadian Homelessness Research Network

Community responses to problems of hunger & food insecurity

Valerie Tarasuk
Professor, Dept. of Nutritional Sciences and the Dalla Lana School of Public Health, University of Toronto

January 11, 2013
12:30 to 3:00
Room140, HNES Building, York University

Everyone is welcome.

YORK U
UNIVERSITÉ
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