Transitional Urban Voids in Austin, Texas

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Transitional Urban Voids in Austin, Texas

A thesis submitted in partial fulfillment of the requirements for the degree of Bachelor of Landscape Architecture

by

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May 2016
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Abstract:

A city’s urban fabric is constantly evolving through development and decay under the fluctuating rates of inhabitation. Cities are growing rapidly as populations climb higher, with new demands for the incoming waves of people seeking employment and a place to call home. Austin, Texas is the fastest growing American city today, with a population growth rate of three percent per year. With this growth and its demands for open space, open spaces in the form of urban voids and temporary use spaces become an interest to designers as spaces with flexibility. The approach of this thesis is to understand these spaces as they relate to the urban fabric as well as the opportunities for use while these spaces remain latent. An on-site case study method was developed as a means to analyze the urban voids in a holistic and experiential manner, providing a way for comparison of urban voids from different areas of Austin. The study seeks to understand temporary uses of these sites and the implications of contextual change. With more innovative and creative people in the city, temporary use spaces can open up opportunity for creation, expression, and sharing. Temporary use sites provide a different experience in the city while activating a space which is in transition from latency to permanent use. This transition through time is another aspect of urban voids which has not been deeply investigated by previous research. By studying these transitory spaces, this study reaches a better understanding of the relationship between time and space in a changing urban environment.
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Chapter 1: Introduction

As the world population rises, the city also experiences spikes in growth. The city is constantly changing as new developments rise and aging sites are cleared to be prepared for a new use. This process leaves voids in the urban fabric. The urban void has become a subject of interest because of its contrasting character with what is understood as open space. It is neither a park or wilderness area, nor is it a plaza, yet it is a space. It is not clear if these spaces have a plan, or if they are forgotten, undesirable spaces. Even in the case of a plan, these spaces lie vacant during the phases of design, revising, and contracting. How do urban voids transition from latent potential to permanent use? Does the transition involve temporary use before a permanent use? How is the temporary use defining the space? These are all questions relating to spatial qualities, use, and time.

Cities are experiencing growth; as a result, developments pop-up to provide housing and amenities for new resident populations. Although developments are appearing at a rapid rate, urban voids still occupy many parts of the urban fabric. They can appear as vacant lots with seemingly no activity. But some of these spaces actually experience occupation in the form of informal activities. People passing through might walk their dog, paint a wall, or plant a garden. The possibilities for use are varied because there is a lack of specified use. These spaces experience changes over the years as they wait to be developed. What kinds of changes do urban voids experience as the environment around them fluctuates? But first, it is important to understand what constitutes an urban void. Urban voids are underutilized, interstitial spaces within the city. The paper will further address what constitutes an ‘urban void’ in the context of a ‘latent space’.
It is through spatial qualities, use, and time that the study will reveal urban voids. The spatial qualities of the site cannot be ignored as they are related directly to the use of the space. Therefore, on-site observation is crucial to the study of urban voids and temporary use spaces. Viewing the transition of these conditions in the context of the urban void as well as its surrounding context will display important relationships. Since these conditions are subject to change over time, the relationship between void and its context also morphs. It is this relationship of transition over time which this thesis exposes and studies.

The study will explore urban voids as ‘latent spaces’ in different stages of use within the context of Austin, Texas. The city of Austin is ranked by Forbes Magazine as the fastest growing city in America (Carlyle 2016). With this population growth, the city is pressured to provide ample housing and amenities for residents. In Austin, urban voids have a potential to become spaces of experimentation for residents and designers. Austin has urban voids all over the city especially in areas outside of the downtown district. In the time that these voids wait for development they can serve temporary uses, which may inform future permanent uses. Austin has a culture of makers and artists, making it an opportune city to test the flexibility of these spaces. Residents can help define the use and character of these spaces. With participation, these spaces can become expressive and lively places. Austin’s growth allows for use of these urban voids as a catalyst for public activation and investment. In order to understand what forms urban voids take in Austin, the study looks for case studies to expose the character and use of these spaces.
Chapter 2: Understanding Urban Voids as Latent Space

Defining urban voids

Urban voids are a type of interstitial space which contribute to a network of open space in the city. Interstitial spaces are ‘in between’ spaces which embody ideas of “openness, porosity, breach, and relationship, but also those of process, transformation, and location” (Levesque 2002). In this network there are different kinds of interstitial spaces with varying forms and scales. They appear in the city as leftover slivers between highways, undeveloped lots, abandoned sites, alley ways, and swaths of land at the periphery of the city. Urban voids are identified by varying names and constructs however, there are key similarities between definitions of urban voids. Often they are a result from urban growth where a number of urban spaces are transforming. Urban voids occur in cycles because of a building’s life span, economic flux, social communities and other variables in a city’s transformation. They challenge defined urban open space such as parks and plazas because of their disordered and vague qualities. While there are different views concerning these spaces, the reality is they are “a constant part of the city” (Rahmann and Jonas 2011, 10).

These urban voids ‘in transition’ are referred to as latent space for the context of this study. The Merriam-Webster definition for latent is, “present and capable of emerging or developing but not now visible, obvious, active, or symptomatic” (Merriam-Webster Dictionary Online n.d.). Origins of latent come from the Latin word latère meaning “to lie hidden” and the Greek word lanthanean meaning “to escape notice” (Merriam-Webster Dictionary Online n.d.). Although hidden from the passerby, latent spaces have potential which has not yet
developed but may emerge. These spaces often escape notice within the city as they lie waiting for development. Shaw affirms that “the qualities and characteristics of urban voids are overlooked within the built environment” (Shaw and Hudson 2009, 3).

**Image of the city with urban voids**

Interstitial spaces have diverse appearances which usually contrast with other imagery of the city. These spaces create breaks in the continuity of urban fabric, which if significant, can negatively affect an area’s ‘legibility’. Legibility refers to the clarity of the city in which “the parts can be recognized and can be organized into a coherent pattern” (Lynch 1960, 2). Lynch suggests that legibility is an important property of a beautiful city, making it “well formed, distinct, remarkable” (Lynch 1960, 10). "Good environmental image gives a sense of emotional security" and "heightens the potential depth and intensity of human experience" (Lynch 1960, 3-5). What kind of image do urban voids contribute to?

Sousa Matos explains that urban voids contrast with the image of defined typologies of open spaces such as parks, plazas, and avenues. These defined open spaces have recognized uses as well as an associated value. Interstitial spaces allow for many other uses, but are seen as “problematic... because of their lack of functionality, typology, and an attributed name” (Matos 2009, 65). Jonas and Rahmann identify “perceived nonperformance” as the root of “our fears, anxiety, and excitement” for urban voids (Jonas and Rahmann 2014, 35). Urban voids do not fulfill what we expect in a city system based on function and usefulness (Jonas and Rahmann 2014). Lynch explains that the image of the city is dependent on the one perceiving it and his or
her cultural views. So while one person may see value and opportunity in an interstitial space, others may see something undesirable (Lynch 1960).

Luc Levesque identifies two contrasting views of urban voids which may color people’s image of the whole city. On one end “people try to ignore the terrain vague, abandoning it to lucrative parking lots or trying quick cosmetic fix to minimize the possibilities of use” (Levesque 2002). In this view the ‘image’ is one of socio-economic deterioration and abandonment. They are unordered, which puts a strain on people who perceive order as safety. After all, architecture’s goal is to make sense of things and create an understanding or order of space. It is “an instrument of organization, of rationalization, of productive efficiency capable of transforming the uncivilized into the cultivated...the void into the built” (Sola-Morales 1995, 122). The opposing view of interstitial spaces is one of acceptance and the ideal potential of these spaces as “alternative ways of experiencing the city” (Levesque 2002). In this second view, spontaneous and informal uses are encouraged in the urban void as a way to counter the power of order and consumption in the city. Levesque critiques both views as limited by idealism. To transform these space in order to limit uses is only reducing the urban void as a simple problem to be solved (Levesque 2002).

The nature of the urban void is that of a space in transition, waiting to be developed either as a permanent open space or a building. In the latent period it is possible to activate the urban void through temporary uses which may inform a permanent use in the future. But what does temporary or permanent mean? The global understanding of permanent is “to last a long time without changes” (Merriam-Webster Dictionary Online n.d.). But this definition of permanent can be vague considering that all things change over time and that time is relative to perception. When considering the contrast to permanent, “temporary” can mean “lasting for a
limited time” (Merriam-Webster Dictionary Online n.d.). But this too relies on the understanding about the length of “limited”. Temporary can range from a few minutes to years. When looking at use of a space, temporary can mean that it has a short life time but can also fulfill a different meaning- that it is flexible to changes. In fact the strength of temporary use is its ability to react rapidly to changing conditions without reducing the possibilities (Kullmann 2014). By recognizing ‘temporary’ in this way, spaces are regarded as temporary use if they exhibit the ability to change. It is this ability that makes these spaces quite different from permanent use which can be regarded with an inability to change. Therefore, the decision to use these spaces in a permanent or temporary way should be guided with intention, instead of an arbitrary relationship with time. ‘Temporary use’ should not be defined by “the nature of use, or whether rent is paid or a use is formal or informal, or even the scale, longevity or endurance of a temporary use”. Intention comes from the user, developer, or planners involved that the use should be temporary (Research 2014)

Despite these different views about void spaces it is probable researchers they would agree that the image of the city is broken up by these vague spaces. While there are contrasting views of void spaces, it is important to note that it is simply a reality that, there will always be these kinds of spaces in a city that is transforming. What becomes of these spaces during the time of expectancy? Some of these spaces have remained undeveloped for years. Likely, if these spaces do have a future plan for development, the implementation of such a plan can be lengthy due to phases of design, negotiation, planning and material sourcing. Even still, these plans can be delayed by “financial, social or other reasons” (Smet 2008, 2) Aurelie De Smet explains that because of this lengthy process “…there will always be a number of urban spaces that are temporarily ‘in transition” (Smet 2008, 2)
Ignasi De Sola-Morales explains the phenomenon of urban voids as ‘terrain vague’, where void is “as absence, and yet also as promise, as encounter, as the space of the possible, expectation” (Sola-Morales 1995, 120). These in-between spaces have gained attention because of their capacity for flexible uses. Temporary projects can be “laboratories” where ideas can be tested. Smet explains that temporary uses can add programmatic diversity, which can inform future designs or uses. With temporary use, a site can become recognized by the community as an important open space and can create possibilities for future development (Smet 2008). This spark of activity can be a catalyst for growth and expression.

Conclusion:

Urban voids are contrary to the ideal of typical urban space. These spaces “exist outside of the city’s effective circuits and productive structures” (Sola-Morales 1995, 120). Because it does not fit into our socio-economic understanding of the city, they are labeled with a negative image. (Shaw) Urban voids create a different way of experiencing the city which contrasts with planned space. Where planned spaces can limit the user through regulation and perception, the urban void houses spontaneity and creativity through openness and activeness. People can become “active architects” in the space rather than just “passive recipients” (Shaw and Hudson 2009, 10). Although urban voids may lie latent for many years, they are transitioning through time in ways that are often unnoticed. Even these spaces can find their own purpose through temporary use. The transition from a latent space to temporary use onward to permanent use is something which has not been examined even though it is related to the nature of these spaces. It is the purpose of this
study to examine the character of several types of urban voids in different states of transition in a city experiencing rapid development.
Chapter 3: Finding a Qualitative Technique

Introduction:

In order to understand this complex social and spatial phenomena of latent space in the city, a case study method has been employed for this study. The case study method is valuable because it enables the study “to retain the holistic and meaningful characteristics of real life events” (Yin 1994, 3). The phenomena can be understood based on its real-life context, which in the case of latent spaces, is important because of the relationship between spatial and social conditions. Another benefit for a case study method is the ability to compare cases with like data to glean additional understanding of the subject (Francis 2001).

For this study, the city of Austin, Texas, has been chosen as a macro context for latent spaces. Within Austin, areas around the downtown have been identified where latent spaces occur. These areas will serve as a micro context for individual latent spaces. Between these two contexts levels, the relationship of latent spaces can be analyzed with social, economic, and spatial conditions to provide a holistic study.

This research is a descriptive multiple-case study. Descriptive research is used to describe a phenomenon. This type of research “focuses on relatively few dimensions of a well-defined entity and measures these dimensions systematically and precisely…” (Singleton and Straits 2005, 68). While there is research on urban voids and related temporary uses, there seems to be a lack of research in the qualities of urban voids over time as they transition between uses. There is also a lack of research about latent spaces specifically in Austin. Although the case studies are valuable
resources individually, an even greater understanding of latent spaces can be gleaned from comparisons. Therefore, nine latent spaces have been identified and studied as individuals, then analyzed together within one larger case study area: Austin. This descriptive study seeks to answer research questions of “what” and “how”.

**Research Questions:**

How do latent spaces evolve over time?

How long do these spaces stay latent?

What happens to latent spaces as they transition through time?

What is the relationship between a latent space and its context?

How does the urban context change around transitional latent spaces?

How does density and grain affect the potential of latent spaces?

**Context of Austin:**

The city of Austin is divided by highways and the Colorado River. The center is split by two highways, Mopac Expressway and Interstate-35, and Lamar Boulevard, creating distinct areas of economic development, social populations, and spatial grain and density. The greatest divide runs north to south along I-35 where there is stark contrast of density, development, and population demographics. The Colorado River also splits Austin into north and south regions, creating a buffer between the two areas. These distinct areas provide opportunity for studying latent spaces in different contexts within Austin (Figure 3.1). The study is organized to answer the following
research questions as an exploration of latent spaces and their context.

![Figure 3.1 – Case Study Areas. Source: Author.](image)

Austin, Texas is a city of opportunity with significant growth in development and plentiful amounts of open space. It also is a significant cultural area for music and arts. According to Forbes, Austin is the fastest growing metropolitan area in America with a 3.15 percent growth rate from 2015-2016 (Carlyle 2016). Austin has the 34th largest metropolitan area population in the United States with 1,716,289 in 2010 (Population Change 2011), which has now grown to an estimated 2,050,311 in 2016 (Robinson 2016). The job growth rate of Austin is 3.28 percent according to Forbes, calculated using data from 2015-2016 (Carlyle 2016). While Austin is growing, there remains quite a few interstitial spaces in the city. As these spaces lie in wait for development they have potential to serve residents as pockets of open space. As discussed earlier, these open
spaces are very different from conventional open spaces such as parks and plazas. They create a space which is transformable by the community to accommodate needs and fulfill creative expression.

These latent spaces create breaks in the urban fabric which can be seen in Figure 3.2. In the process of real estate purchases, lots can be consolidated to create higher density buildings. Mixed use buildings with residential and commercial uses are popping up all over the city. This kind of growth is occurring in east Austin along 6th St., on the west along Lamar Blvd., and south of the river along Barton Springs Rd. Since the majority of population growth from 2000 to 2010 was located in the suburbs surrounding Austin, the density of the core area is somewhat lacking. Some inner areas such as downtown and near the University of Texas have recently received significant population growth (Figure 3.3). The highest population density zip code is near the University of Texas with 15+ persons per acre. A large strip between the Mopac Expressway and I-35, which houses the residential areas in the immediate area of Austin, have a population density of 5-10 persons per acre (Figure 3.4). Even though downtown has building density, it lacks a significant residential density. Density and grain are aspects which are important to the life of a place. A lack of residential density can lead to a deterioration of life on the streets, and consequentially, decreased popularity; both of which are can hinder businesses and social spaces (Jacobs 1961). Latent spaces, too, would see activation in denser and more diverse areas.
Figure 3.2 – Sites on a figure ground diagram of Central Austin, Tx. Source: Author.
Figure 3.3 – Population Growth and Decline: 2000-2010. Source: City of Austin.

Figure 3.4 – Population Density 2010. Source: City of Austin.
Sampling:

The case studies are sampled from the defined areas of West Austin, Downtown Austin, East Austin, and South Austin. In order to get a diverse selection of latent spaces in Austin, all of the case study areas represent varied demographics, densities, grains, and land uses. The sites are selected using purposive sampling in order to identify latent spaces best suited for the purpose of the study. Latent spaces are located on a map starting from the downtown area and working outward toward the other defined areas. Each area has a different distribution of latent spaces; in response I chose spaces that appeared the most varied in use within each area. The latent spaces are divided between temporary use and permanent use.

Data Sources:

Yin identifies six different types of data sources for case study research. They include: documents, archival records, interviews, direct observation, participant observation, and physical artifacts (Yin 1994). The data sources used for this study are documents, archival records, and direct observation (Table 3.1). Through the use of these different sources, a greater understanding of the case can be achieved. Documents include maps and statistics compiled by the City of Austin. Archival records are Google Earth aerials, Google Street view, and GIS data. Direct observation includes photographs, section drawings, sound studies, commentary, and map notations made by the author on the case study site.
Table 3.1 – Data Sources

<table>
<thead>
<tr>
<th>Data Source Type</th>
<th>Data Collected</th>
<th>Constructs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Documents</td>
<td>City of Austin maps and statistics</td>
<td>Grain, Density</td>
</tr>
<tr>
<td>Archival Records</td>
<td>Google Earth Aerials, Google Street View, GIS data</td>
<td>Grain, Density, Scale, Enclosure</td>
</tr>
<tr>
<td>Direct Observation</td>
<td>Map notations, Commentary, Sound Study, Section drawings, Photographs</td>
<td>Density, Scale, Enclosure, Sightlines, Materiality, Sound, Smell, Complexity, Expression</td>
</tr>
</tbody>
</table>

Case study research allows for usage of multiple sources of data. In doing so, it makes a stronger case because of a convergence of evidence (Yin 1994, 97). A convergence of evidence bolsters the validity of findings in a case study. In having multiple sources of data, the case study is likely more accurate. This study has two types of triangulation – data and methods. Multiple types of data- documents, archives, and direct observation- are used to triangulate evidence. The study includes methods which are declared as constructs in Table 3.2.
Table 3.2 – Operationalization of Constructs

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Operationalization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grain</td>
<td>Fine: high mixing of elements – less than 50% of one type with at least 4-5 types&lt;br&gt;Coarse: low mixing of elements – 50% of one type or dominated by two types&lt;br&gt;Blurred: gradual change between clusters of elements&lt;br&gt;Sharp: abrupt change between clusters of elements</td>
</tr>
<tr>
<td>Density</td>
<td>Low: low building coverage – 1-2 stories&lt;br&gt;Medium: low or high land cover – 3-8 stories&lt;br&gt;High: high land cover – 8+ stories</td>
</tr>
<tr>
<td>Scale</td>
<td>Sites 1 acre or less are considered small scale sites</td>
</tr>
<tr>
<td>Enclosure</td>
<td>No vertical elements at the site boundaries&lt;br&gt;Permeable vertical elements at the site boundaries&lt;br&gt;Non-permeable vertical elements at the site boundaries&lt;br&gt;Proportion of vertical element to the space</td>
</tr>
<tr>
<td>Sightlines</td>
<td>Wide sightlines&lt;br&gt;Short sightlines&lt;br&gt;Far sightlines</td>
</tr>
<tr>
<td>Materiality</td>
<td>Connections between materials&lt;br&gt;Variety of materials&lt;br&gt;Character of materials</td>
</tr>
<tr>
<td>Sound</td>
<td>Variety of sound&lt;br&gt;Types of sound: nature/man-made&lt;br&gt;Magnitude of sound</td>
</tr>
<tr>
<td>Smell</td>
<td>Pleasant or unpleasant&lt;br&gt;Fitting for the atmosphere and place</td>
</tr>
<tr>
<td>Complexity</td>
<td>Identifiable spatial patterns: yes or no – example: symmetry/asymmetry&lt;br&gt;Mismatched elements or cohesive elements&lt;br&gt;Engaging space encourages exploration through stimulating elements or spatial conditions</td>
</tr>
<tr>
<td>Expression</td>
<td>Historic evidence: remnants&lt;br&gt;Modifications to the site: traces of people&lt;br&gt;Types of elements on site</td>
</tr>
</tbody>
</table>


**Constructs:**

The constructs are ways of analyzing the character, economic use, spatial organization, and social relationships of the case study and its context. Some are recorded off-site while many of them must be analyzed on-site. On-site conditions are a snapshot in time. Multiple site visits during different times of the year could not be conducted due to funding and time constraints. However, the value of conducting on-site analysis is to analyze experiential qualities and character of the site, as well as verify information found off site. These constructs provide a way to compare different spaces by creating a repeatable method.

The on-site methods were determined based on the training of landscape architect to analyze spaces. Through methods of mapping, notation, commentary, sound study, section drawing, and rubbing. Maps are used to identify elements, views, topography, uses, and document commentary. Notes and commentary are made on separate sheet of paper prepared with categories. Sound studies are produced on a separate sheet of paper. Once a sound has been identified and marked at one site, the same symbol is used continuously for all the sites. Sections and rubbings are made on separate sheets of paper.

**Off site:**

Density:

Density refers to the number and closeness of features. It is measured as the amount of something per unit of land (Lynch 1981). Density can describe many different relationships. It can be used in the comparison in the amount of buildings to open space, residents to a building, and
amenities to residents. Density encourages life in the city by putting people, open space, and amenities in close proximity. Jane Jacobs stresses that density is a “necessary condition for flourishing city diversity” (Jacobs 1961, 205).

Density of buildings is recorded as commentary. Density is a ratio of open space square footage to building square footage. Buildings which are 1 to 2 stories are low density buildings. An abundance of open space relative to the building footprint is marked as low density. Medium density is recorded for a high land cover of building or buildings 3 to 8 stories. High density is recorded for very full land cover of building or buildings more than 8 stories. A higher percentage of building coverage than open space is required for high density.

Grain:

Grain refers to the mix of elements, activities, or types of people in a space. Grain is often discussed through terms of diversity and land-use mix. Diversity can be determined through variables of sex, age, race, and household size and income. Lynch describes grain mix as fine or coarse and grain transitions as sharp or blurred (Lynch 1981, 265). When clusters of one element are dispersed among other different elements, the grain mix is described as fine. In opposition, a coarse grain is characterized by large areas of one element with little mix to no mix of other elements. If the transition between clusters of elements is abrupt, then the transition is sharp; a gradual transition is blurred. By looking a block or two off the site in all directions, grain can be determined. A fine grain can be considered for less than 50% of one type with at least 4-5 different types. A coarse grain can be considered for 50% or more of one type or dominated by two types.
On-site:

Scale:

Measuring scale on site is done through direct experience and also to be documented off-site using Google Earth. While walking around each site, sections and photographs are used to document and measure the scale. Scale is measurable by comparing the footprints of each site. Many of the sites were selected to be small and manageable sites for the ease of conducting the on-site research.

Enclosure:

Enclosure is measured by vertical elements on and adjacent to the site. The sense of enclosure is dependent on the scale and proportions of the site. Vertical elements documented include trees, fences, buildings and structures. Sense of enclosure is analyzed with photographs, commentary, and sections. Enclosure can be determined by observing the location of vertical elements, their proportional height to the space, and their visual permeability. If visual boundaries are located at the site’s physical boundaries then it should be determined if they are visually permeable or non-permeable materials. A space with a permeable boundary is perceived to have less of a sense of enclosure than does a space with non-permeable boundaries. If the proportion of those elements are small compared to the horizontal space, then there is less enclosure. A sense of enclosure is important to the overall experience of a space. It is a basic spatial understanding which is a framework for other experiences.

Sightlines:
Sightlines are crucial for wayfinding in and off the site. Sightlines of important buildings, monuments, or key places are a way for users to understand where they are in the city. Important views are recorded on maps with notations and photographed. Sightlines can affect how a space is experienced. Sightlines can be wide views, short views, or long views. They can also be numerous or limited. If sightlines are limited, the occupant might feel isolated. On the opposing end, if there are a large number of sightlines with wide views, the user may feel exposed. These experiences are important for understanding possible uses of the site.

Materiality:

Materiality is directly linked with experience of a space. It influences how a space is perceived. When on site, different materials were observed such as hardscape or plant material that defined the spatial quality. The materiality of the site is recorded with rubbings and photographs. Materials are examined for different reasons. Connections between materials, variety of materials, and the character of materials are all aspects to consider when recording materials. Connections are simply how materials meet and how that connection defines a space. Variety of materials is related not only to the number of materials but also the types of materials. Are the materials natural or manmade? Materials can be organized as softscape or hardscape materials. Where softscape materials include live materials such as plants which grow and change over the year. Hardscape materials include stone, wood, metal, and concrete which are used as hard and fixed elements of a site. These can be expressed in the ground plane as walking surfaces, vertical defining elements, or as a ceiling definition. Character of materials is the quality of the materials and how that quality affects the sensorial experience. Does the material create a feeling,
or mood for the space? Color is another method of analyzing material quality. Looking at the material palette as a color range allows for an abstract view of mood and atmosphere. Materials which were influential to the experience and character of the space were selected.

Sound:

Sound is evaluated by listening for and recording sounds for five minutes in one location on the site. The sound reflects the activities and character of the site. Atmosphere can be determined with sound studies by analyzing the magnitude of different kinds of sound. Sounds are separated into two types: man made and nature. The sounds of cars and construction would be contribute to manmade sounds. This isn’t to say that manmade sounds cannot be pleasant; music, for instance, is also a manmade sound that can create a specific mood for a space. Nature sounds are those of animals or elements such as water or wind. These sounds usually create a different atmosphere than manmade sounds. Other important factors for sound are the magnitude and the variety. Having a variety of sounds creates a more robust and busy environment than having a limited variety. Loud sounds can also dominate over other sounds to affect the mood and character of the space.

Smells:

Scents are recorded with commentary. The method for collecting scent was done by walking around the site and recording smells that were encountered. Smell has a sharp link with memory. It can influence the experience of a place in memorable ways directly linked with
materials or uses of the site. All smells should be documented as objectively as possible with some notation of experience. Identifying scents as pleasant or unpleasant can add to the character of the site. Does the smell fit with the activities and uses happening on the site? Since scents can affect experience and character, it is important to evaluate if the smell is enhancing the experience of other elements or contrasting to the character.

Complexity:

The complexity of elements was recorded on the site. Complexity relates to the user’s ability to read the parts of a space and understandable it as a whole. Elements of the site may relate to one another or seem disordered. Observing complexity includes looking for contradictions or opposite conditions which occur on site. This is recorded with commentary and photography. How do these oppositions balance on the site? Is it disorientating or stimulating to the senses? Examples include: symmetry or asymmetry, gridded or flowing, matching elements or chaotic mixing. Identifiable patterns such as symmetry can help someone orient himself or herself in a space. Elements may seem mismatched but this can contribute to the character of a site. Complexity can be involved in making engaging spaces which create a memorable experience for the visitor.

Expression:

Studying the expression of historical or cultural attitudes on the site requires observing the condition of the site and its immediate surroundings. This is a bit more difficult to document since it relies heavily on the observer and his or her own perception. I looked for cultural attitudes based
on the elements present, condition of elements, organization of elements, and activity on the site and adjacent to the site. It relies on looking for traces of people on the site. Finding modifications performed on site or traces of human activity are ways of finding expression. Historical evidence is harder to find except in remnants on the site. Remnants can bring one back to a past moment, enriching the experience of the place. Expression is observed through photography and commentary.

Conclusion:

The methods are used for determining spatial qualities as a way of identifying character. Different types of data and methods are used to triangulate evidence. Having multiple sources creates multiple measures of a phenomenon which validate the findings. Types of data used in the study of latent spaces are documents, archives, and direct observation. All of the constructs look at conditions which affect experience and character. Density and grain are constructs analyzed primarily off site. Scale, enclosure, sightlines, materiality, sound, smell, complexity, and expression are all observed on site during a specific moment in time. Observation on site requires past knowledge of analyzing space. The researcher has obtained this skill through the study of Landscape Architecture.
Chapter 4: Comparing Latent Spaces in Austin

Introduction:

There are nine case study sites, with representation in the four areas identified. Of the nine sites, two are in West Austin, one is in Downtown Austin, one is in South Austin, and five are in East Austin. Sites were selected to get representation from different types of temporary use as well as a more permanent use site. Analysis is conducted on all of the case study sites by evaluating all of the constructs for each site and comparing them to one another. See Figure 4.1 for site locations in Central Austin.

Figure 4.1 – Site Locations on figure ground diagram of Central Austin, TX. Source: Author
Scale:

As can be seen in Figure 4.2, many of the sites have a similar scale. There is a small range of scale with the largest site being 1 acre and the smallest site being .1 acres. The largest site, Hope Outdoor Gallery is also the site with the most elevation change, with an estimated change of 40 feet from the bottom to the top of the site. The smallest site is 'The Jamaican' which is located on E 11th St in East Austin.

Figure 4.2 – Plan Scale Comparison. Source: Author

The contrast between the largest and smallest site affects the feeling of enclosure and sightlines which help form the overall experience. The Hope Outdoor Gallery is large enough to encourage exploration while The Jamaican is easily understandable from any point on the site. A sectional comparison can be seen in Figure 4.3 for clarity on the difference in scale.
Enclosure and Sightlines:

Measuring enclosure involves looking for vertical elements which define the space. Views are established by walking around the site. The vertical elements can affect sightlines and views within and views looking outward from the site. Among the case studies, one is strongly enclosed, five are enclosed, and three are open. Reference Figure 4.4 for an enclosure comparison showing important views in red, vertical elements in black, and canopy cover in gray.
The most open sites are The Red Venue, The Jamaican, and The Bus Stop; the most enclosed sites are The Remnant, The Zen, and Hope Outdoor Gallery. The Remnant site is strongly enclosed due to the scale of the space compared to the adjacent buildings and vegetation. The site is visually permeable through a chain link fence on the north and south openings. While the remnant columns on site do not actually prevent movement or views, they imply a space with their gridded and symmetrical organization. This site is very intimate in comparison with many of the other sites because of its strong enclosure and limited views. In contrast, The Bus Stop, The Red Venue, and The Jamaican are open with limited spatial definition and wide views off the site. Their spatial definition rely on adjacent buildings, fences, and nearby trees. These spaces are perceptibly exposed due to the lack of enclosure. See Figure 4.5 for an example of an open site, The Bus Stop. Too much enclosure, however, can create a feeling of isolation. The Zen, which used to be a food truck site is separated from the street by an impermeable fence. In this case, the barrier separates the site from the public realm, perhaps contributing to its lack of success. All of the case study sites in East Austin use a fence to delineate the space. In some cases the fence becomes a buffer from the street, although it also restricts movement into the site. In other cases the fence is a clear way to restrict access to the space.

Figure 4.5 – Open site, The Bus Stop. Source: Author
Materiality:

Materiality delinates threshold, embodies place, and enhances experience. The evaluation of materiality involves close attention to the materials of the site and how they delineate space and contribute to the experience. The way that materials meet, especially on the ground, can affect the clarity of delineated space. The materiality of the ground and ceiling can affect other experiences such as sound, smell, and temperature. By categorizing ground and ceiling materials as softscape or hardscape, a connection can be made between material and other experiential constructs. For example, softscape invites birds and other animals to a site. Birds make sounds which create a relaxing and more natural atmosphere in the city. There is a correlation of bird noises to softscape, as many of the sites are covered with grasses and trees. Sound studies can be found in Appendix 2. The more designed sites also have an element of permeable hardscape along the ground of the site. The intention is to create a more walkable ground plane while offering a cooler temperature option than concrete or asphalt. Austin experiences hot summers, so the permeable and softscape ground covers are ideal for keeping the temperature cooler. The shade coverage is also important in the heat. Many of the sites have a material ceiling in the form of either tree coverage or some sort of shading structure. A diagram of softscape and hardscape materials on the ground and ceiling can be seen in Figure 4.6.

Color is also a condition of materials. The mood of a place can be affected by color. Therefore it is an important quality for materials. Many of the sites are dominant in greens and browns as they contain many softscape elements and natural hardscape materials. Bursts of color can be found in some of the sites. Reds and blues are common among sites with painted elements. The Red Venue, The Picnic, Hope Outdoor Gallery all have strong elements of red. Red
is a warm, bright, and energetic color. As a site of high energy and socialization, the color red fits The Picnic well. Hope Outdoor Galley, The Remnant, and The Backyard all have a strong blue presence. Blue evokes calm and relaxing feelings. A color diagram showing the most prominent colors for each site is seen in Figure 4.7.

The condition of materials may convey the passing of time on the site. See Figure 4.8 for materials of each site. Many of the materials include natural elements such as plant material, wood, and stone. These natural elements decay and change in various ways over time. Plant material and wood are more susceptible to weathering and decay, while stone has more durability. Materials such as metals and concrete are found on several sites. The inclusion of these materials brings an appearance of rigidity and permanence. However that is not always what these materials come to represent. In the case of a more permanent site, The Picnic, metal food trucks surround a steel pavilion with wooden tables on decomposed granite. Although both made from the same material, the structure is a more permanent gesture while the food trucks are a changing form on the site due to their mobility. Concrete columns on The Remnant site call to the past, while the fresh, bright grasses represent the passing of time from winter to spring. The Backyard site features materials are weathered and put together in an eclectic way. Murals are set crooked, painted walls are left unfinished, and plants are kept in their original sale containers; all of this conveying an unfinished and relaxed mood, as if it were someone’s backyard. See Appendix 1 for rubbings of materials.
Figure 4.6 – Softscape and Hardscape Diagram. Source: Author
Figure 4.7 – Most Prominent Colors Diagram. Source: Author
Figure 4.8 – Materials. Source: Author.
Figure 4.8 continued – Materials. Source: Author.
Smell and Sound:

These two sensory aspects of a site change constantly and are dependent on weather, the season, materials, and use. Since these constructs are always changing, the study views the recording of smell and sound as a snapshot in time. Smells are recorded as commentary while sounds are recorded on paper using a drawing dictation method. The sound studies are conducted over a period of five minutes. Two sites are not represented by a sound study due to researcher error. However, there are still correlations between the sites measured. Looking at the top three most prevalent sounds on the site can show connections between sites. The most prevalent sounds across the seven sites recorded are bird chirping, leaf rustling, and car traffic. These can be seen in the sound study drawings shown in Appendix 2. Car noises of some kind can be heard on all of the sites, however the most prevalent and most frequent sounds were usually those of birds or leaves rustling in the wind.

Density:

In order to analyse the density of an area, building density, dwelling density, and use density are compared together. To see the locations and density off all the site areas, reference Figure 4.9. The case study with the highest building density is The Bus Stop, located in Downtown Austin where there is a high ratio of building to open block space, featuring a few buildings that are eight or more stories. It also has the highest use density. Its proximity to the Capitol supports the land use of office spaces. There are a couple multi-family building close by, but the majority of use is office or civic, therefore the residential density is low. In contrast, The Picnic has the highest residential density even though there is a lower building density. Many of the buildings are multi-family residential buildings more than 8 stories. It is also mixed with medium density commercial.
A majority of the spaces reside in low building density areas with low to medium residential density. This is largely due to many single family homes. East Austin has large low density industrial-use buildings with spaces left open between. The Red Venue has the lowest building, residential, and use density. Its location in East Austin is among single family homes and single-use commercial buildings, although there is a multi-familiy residential building being built across the street which will contribute to raising the residential density. Deep Roots Garden is also a low density area mainly due to its location near a park and stream corridor. It is near a high density residential tower and two large parking garages. Although there is a high density residential tower close to the site, it is the only source of residents for the block area therefore it is closer to a medium residential density. The density for each area can be seen in the figure ground images in Figure 4.10.
Figure 4.9 – Site Locations on a Figure Ground Density Map. Source: Author.
Figure 4.10 – Density Comparisons. Source: Author.
Grain:

The measure of grain is determined by looking at the mix of land use and people. Grain is either determined to be fine or coarse depending on the percentage of mix. The transition between different clusters of elements is either described as sharp or blurred. Of the study areas the most fine grained mix of use is in East Austin. East Austin also has more variation in block sizes. Downtown Austin and East Austin have the most blurred use transition while West Austin and South Austin have the sharpest grain transition. The areas with the most mixed color in the diagram of Figure 4.11 have a fine grain use. To see the land use for all site areas see Figure 4.11. The commercial, office, and industrial land uses are concentrated along vehicular corridors with pockets of residential located behind. Looking at Figure 4.12 and Figure 4.13 there is a clear separation of uses which is coarse and sharp overall. Several of the case study spaces are along those edges where commercial and office use meet with residential use. This creates a sharp transition of grain which is usually undesirable for communities (Lynch, A Theory of Good City Form 1981).

The most sought out grain is fine and blurred (Lynch, A Theory of Good City Form 1981). Looking at Figure 4.14, the most desired site locations based on grain would be all of the sites in East Austin. The least mixed sites are Deep Roots Garden, Hope Outdoor Gallery and The Picnic. These areas have the least amount of mix with the most sharp boundaries. They are located along corridors where two major uses meet. They also occur in neighborhoods with less diversity of income and race. East Austin has little income diversity but more racial diversity than other case study areas. In fact, there is a strong divide in income between East Austin and West Austin (see Figure 4.15).
Figure 4.11 – Land Uses. Source: Author.
Figure 4.12 – Grain of Residential Land Use. Source: Author.

Figure 4.13 – Grain of Commercial, Industrial, Office, and Mixed Use. Source: Author.
Figure 4.14 – Grain Comparisons. Source: Author.
Time:

Time is a construct which mingles with all of the other constructs. It is more difficult to measure within each of the constructs as some are required to be recorded on site and in a moment of time. It also is time extensive to study. Constructs such as density and grain are a bit easier to document if the resources and time are available.
Latent spaces have a unique relationship with time. They are flexible to change and open to transformation. Moments of time are recognized in passes and cycles. A flow of energy permeates the site and then recedes. These spaces can seemingly be stagnant in time when viewed through a lens of use. The program, or intended use, largely affects the qualities of a space and therefore is the focus of transition. This is further explored in the Hope Outdoor Gallery case study.

Wild vegetation secludes tiers of towering concrete walls imbedded into the hillside. The abandoned atmosphere is likely what attracts graffiti artists to its blank canvas. The potential of the space as a graffiti park was only realized after someone initiated their mark. Once the abandoned foundations walls were given a program of “graffiti art gallery” it became a destination for various people to gather. The number of visitors is now greater and more diverse than before. But even the number of visitors can alter the quality of the site. It becomes busier, louder, and as a result has more surveillance. Surveillance can increase the perception of safety and invite more people. The Hope organization takes care of the upkeep with donations and volunteers. Without the program designation this place would have remained a wild graffiti lot with limited visitors. The qualities of the site that originally attracted graffiti artists have been altered as a result of its new program.

Each of these informal spaces has a different character, but they share some experiential moments. The complexity of some spaces is more apparent than in others. Over time, the level of complexity can fluctuate and affect the experience of the space. Transition can happen through different qualities of time, space, experience, culture, economics, and ecology. Through time, emotional and physical investment can take place in these temporary spaces.
The transition between seasons can be seen through the changes in day length, temperature, precipitation, and plant material. The cultural response to those processes is also an indication of transition through time. Grasses reach higher every summer swaying in the breeze as vines tangle through chain link fences. Birds flutter around their nests, carefully made in nearby trees. This bit of wild abandon may be trimmed and transformed into a more neat and tidy image. This act of mowing an overgrown lot reflects how our culture views vegetation in the urban environment (Nassauer 2001). The maintenance (manicuring) changes the spatial, experiential, and ecological qualities in the site. In doing so, there is a reflection of culture and an effect on the local economy.

Appearance often cues people to the conditions of a site. This is the case in several of the sites with “wild” vegetation. The Zen site has a grass covered area which is allowed to grow for a period of time before it is cut back. The Hope Outdoor Gallery has more wild vegetation which is maintained by the walking traffic on site. People carve paths and keep the grasses at bay. The grasses divide the space into pockets and paths and even become a painting surface as seen in Figure 4.16. The site conveys a relaxed and carefree atmosphere. The many worn paths convey a message of frequent use and habitation which can be read by anyone who visits the site. The area around Hope Outdoor Gallery is a historical residential neighborhood which has changed very little in the last 12 years. South of Hope Outdoor Gallery, is a rapidly growing area with new office, commercial, residential and mixed use developments (Figure 4.17). Near this area is also Deep Roots Garden which is located along the park east of the outdoor gallery. Economic growth is bringing more people to the area, creating a pressure on the commercial lots along Lamar Blvd. This will affect the gallery and the garden, spatially and experientially. Growth could create an
opportunity for the land owner to develop the land into a multi-family residential building, which was the original intention for the site. There may be a public outcry for the space to remain after its popularity as an attraction, an open space for youth, and a canvas for artists. It is important to realize that these kinds of spaces can make such impressions on people, but also that, as temporary use spaces, the initial intention was never for permanence. See on-site changes over time in the timelines in Appendix 3.

The Backyard and The Jamaican are two sites which are located on the same block. They have a similar temporary use as venues that house food trucks, however, The Backyard is much larger and significantly more closed off from the street. Through time these sites have accumulated more trucks and features. From 2002 to 2015, the area of these two locations has seen much change to the urban fabric with the addition of several multi-family housing, offices, and retail. The area has been highlighted with the changed lots identified in blue and the site

Figure 4.16– Vegetation at Hope Outdoor Gallery. Source: Author.
locations in red (Figure 4.17). The spur of activity has brought life to the area and will likely put pressure on these latent lots to develop in the near future. These spaces seem to be growing with the development and should be considered as important spaces to the community, although these communities may eventually be pushed out by recent developments. It will be interesting to see how the spaces will transform in the coming years as development continues in the area. See example timelines of changes on site in Figure 4.18. All timelines can be found in Appendix 3.

Figure 4.17 – Location of Urban Changes from 2002 to 2015. Source: Google Imagery with edits by the Author.
Figure 4.18 – Timelines of the Jamaican and The Backyard. Source: Author.
The area by The Red Venue is seeing similar development as it is being redeveloped into a mixed use community. Multi-family residential buildings are appearing along E 6th St as the demand for housing climbs with the rising population. East Austin is experiencing gentrification as property becomes more valuable. This is another area that would be interesting to follow in the coming years, as the grain of people and use can become finer. The site gained its name from the Author by the red fence that surrounds the entire site and transforms the space from a grass lot to a temporary use space. The space is only occupied by tables and a few potted plants despite the intention for as a food truck venue space. The lot was occupied by food trucks before the addition of the fence, but now it lies empty. This seems to be an unintended result of putting a fence between people and occupiable space. Transformation of the site over time can be seen in the timeline Appendix 3.

The Picnic is located in South Austin which has been growing more recently. According to Austin’s land use map, the site is labeled as park land use, making the development of that land unlikely. Therefore the greatest opportunities for growth are along Barton Springs Rd. and Lamar Blvd., both with commercial, multi-family residential, and mixed use developments. Residential developments have been popping up in South Austin as in other areas of Austin. Changes of the site can be seen in Appendix 3.

The Bus Stop, in contrast to many of the site areas, has seen very little growth and development. This is likely due to its location in Downtown Austin which has a higher building density than the rest of Austin. The lots are mostly office use with some mix of residential. Its proximity to the Capitol makes it an opportunistic site. The site has gone through very little transformation over the past 12 years (Appendix 3). Besides the consistent maintenance of
mowing, the site has experienced the loss of several trees and the addition of a bus stop along Guadalupe St. The name of the site comes from this change which occurs along the east edge of the site.

The Remnant and The Zen lie only 30 feet from each other along E 6th St. In this area mixed use development is being introduced to turn it into a walkable Transit-Oriented Development. Currently, some of the buildings lie vacant while others are successful businesses or industrial buildings. The Remnant site has remained in a latent state since before 2002. The site is blocked off by a chain link fence which allows views, but restricts access. Two rows of concrete columns sink into the grass as reminders of the past. These remnant columns have given the site a name and an identity. It is maintained only by mowing. It is unknown how long this site will remain in its state of latency, although there is opportunity for use of the site if it were accessible.

The Zen had a similar latent state as a grass lot maintained by mowing, until it was transformed by a food truck vendor into a ‘zen garden’ with gravel and sandstone. A wooden fence was built along the street side when the site was established as a food truck venue. However, the food truck lasted only a year before permanently closing. Perhaps it may reopen or a new truck may come into the site. But for now The Zen remains in a state of latency. See Appendix 3 for a timeline of The Remnant and The Zen.

**Synthesis:**
This section synthesizes the constructs into a narrative explaining the implications for each site and for Austin overall. Timelines have been produced with Google Street View and Google Imagery to analyze changes to the latent spaces over time. See Appendix 3 for these timelines.

Hope Outdoor Gallery:

One of the most interesting temporary use sites is Hope Outdoor Gallery due to its history as a failed condo project in the 1980s. Several years after its standstill, graffiti started appearing on the foundations of this abandoned project. The markings spurred a reaction from the owner and other parties. Was this vandalism? It was, but the owner of the lot decided to put the land to a new use. The land was temporarily dedicated to the Hope Foundation as a graffiti park in 2011 and now it is a popular destination for visitors and local artists. It has a rough appearance, yet parents, children, teens, and seniors frequent the site. Its public atmosphere allows this privately owned space to flourish as an attraction. While the Hope foundation does have rules for visitors, a lack of regulation on the site creates a space which has risks if users are not careful. There are no paved paths and the way to the top is steep with soil only stabilized by the concrete walls and vegetation. A sense of freedom and danger is present in the looming concrete walls and brittle dirt paths. Young people test themselves by climbing walls, running up slopes and picking through thick patches of grass.

The beauty of this space is the collection of steep dirt paths, wild vegetation, gritty unfinished concrete, and layered aerosol paintings. When one is there it’s best to soak it all in and get a little lost in the chaos of the many paintings. Many colors spring from the wall creating an interconnected canvas. Art is fleeting here, as paint is layered many times. The next visit will bring with it a new experience, as some of these paintings may only last a few months, days, or even
hours. This ephemeral quality creates an importance on the present moment. Transition is part of this site because no painting is too precious for transformation. Transition is part of the art, plants, people, and eventually its use. One day this site will transform again since the graffiti park is intended as a temporary use of the site. Enrichment comes from the lack of preservation on the site. It becomes a place of experimentation in space, time, and art.

Deep Roots Garden:

This community garden lies on the edge of a park within an area of office, commercial, and residential use. Taller garages and a high density residential building lie across the street from the garden, creating an enclosure with assistance from trees of the creek corridor. The space is delineated by a simple garden fence. The layout is somewhat symmetrical and provides garden plots for nearby residents. Its proximity to a park and trail makes it a fitting place for a community garden. Birds are present on site, chirping and creating an oasis atmosphere within the city. The garden was established in 2013 in partnership with Whole Foods Market. Benches have been added but the garden has largely remained the same since its beginning. Perhaps the garden will inspire similar temporary uses within other areas of Austin. It is likely that this space will remain for some time as long as people desire it.

The Picnic:

As a meeting area this site is successful. It is a food truck venue which was developed with a multi-family residential building. Located on Barton Springs Rd., it has the luxury of being within walking distance to Zilker Park and the Performing Arts Center. The Picnic offers a variety of food truck options with a nicely lit, covered seating area. They even built a bathroom on site for users.
Although the space is small, it is packed with trucks and tables to create a vibrant and enclosed space. There is quite a variety of people at the location. Families, young adults, seniors and even dogs are all welcome here. This site is a bit more permanent in its construction. It can be speculated that the intention is probably to sustain the site for a relatively long period of time because of investments made on the site. Despite its more ‘permanent’ infrastructure the site is still temporary because of its flexibility in use. Even if all of the food trucks leave, the space could still evolve into a new temporary use.

The Backyard:

This ‘urban backyard’ has gone from a grassy latent lot to a recognized temporary use space in East Austin. A stage sits at the edge of the site, with aerosol art around the perimeter. Plants are in pots, placed among the food trucks dotted across the site. A small vegetable and flower garden occupies a space near an entrance to the site. The site becomes more privatized by the addition of the wooden fence, defining and secluding the space from the street. The Backyard seems to be adding pieces here and there as people are able to give time and resources. It feels a bit chaotic with random pieces of furniture littering the grass and almost half hazard arrangement of mismatched panels of aerosol art. The temporary use has remained as a food truck venue and has also incorporated some related uses such as live music and gardening. As the area becomes denser, open space like this will become more valuable as a place of respite and community engagement.

The Jamaican:
Directly adjacent to The Backyard lies The Jamaican site named for its temporary use food truck “Tony’s Jamaican Food.” In 2002 the site was simply a grass corner lot. When the Jamaican food truck was added more pieces began coming to the site. A salon truck was added to the site recently which adds a new service to the community (Appendix 3). The addition of the residential building across the street helps define the enclosure of The Jamaican. The openness to the street welcomes the passerby to sit down on one of the many benches. As a corner lot, the site is more likely to be developed as growth continues. In scale, this site is the smallest of the case study sites, though it does not necessarily see significantly more or less changes than any of the other sites. Perhaps it will eventually be joined with The Backyard, but in the meantime it is a separate, more public extension of The Backyard.

The Remnant:

Seemingly ordinary and passible at first sight, this small latent space located on E 6th St. is a space of remnants. A grid of remnant columns on the site demarcates an implied space and a reference to a structure long gone. The site is closed off from access by a chain link fence. Over 12 years the site largely remains the same, as the only changing elements on site are the plant materials that experience seasonal change. Around the site, there is a pottery store, a restaurant, a single family home, an abandoned building, and a large industrial building. The changes that have occurred around the site are mostly commercial and industrial use to mixed use along E 6th St. The addition of new multi-family residential buildings will create more density and potential for pedestrians on the street.

The Red Venue:
The flexibility of this space has been reduced since the introduction of the red perimeter fence. As a grass lot, there was potential for change and reconfiguration of space. Food trucks occupied the site before the implementation of the fenced area. Even though the fence is permeable and does not block the visual access into the space, it isolates the lot from the street. The fence begins to announce the space as occupiable space, however it remains locked and inaccessible. This implementation of a fenced off area seems common among the three spaces located in East Austin: The Zen, The Backyard, and The Red Venue. All three also feature food trucks as temporary use elements. The area along E 6th St. is becoming denser with multi-family residential and mixed use. The implication for such change is that a livable, walkable community can evolve over time. Which means that latent spaces like this may be considered for development. If these spaces remain they could become pockets of flexible space for such residents for to not just occupy but to use and adapt. The use could be any number of ideas that individuals or groups initiate, create, or test.

The Zen:

The Zen, much like The Red Venue, has been transformed from a grassy lot into a food truck area. For several years in the early 2000s, the site was a grassy lot with trees. The vegetation is managed by mowing but otherwise changes are minimal. A fence was added in 2014 to enclose the space and separate it from the street. After the addition of the fence, the food truck permanently closed down, and though it cannot be proven that the fence affected the site’s success, it seems likely. Closing off a site from the street makes it more privatized and less inviting to passersby. Perhaps the location of 6th St. is not appropriate for food trucks as of now. There is not enough density and the street lies within an industrial area. Some of the buildings lie vacant,
though the area has recently seen significant growth in multi-family housing additions. With density, the area may become more active or open to food truck opportunities.

The Bus Stop:

Two blocks down from the Capitol and adjacent to Guadalupe St. lies The Bus Stop. It also is relatively close to the University of Texas. The location of this site has great potential. With the addition of the Capitol bus stop to this latent space, it receives constant traffic along its edges. Over 12 years, the site itself has not changed much. The grasses grow and are kept at bay by mowing. Several small trees were removed with the addition of the bus stop making the site open to the street. The urban fabric stays relatively similar as it is close to the capitol and within downtown. This site remains one of the only latent spaces in downtown.

**Conclusion:**

In all of Austin there are many undeveloped lots and latent spaces. This study analyzes these spaces by looking at spatial qualities, use, and time. The spatial qualities of the sites vary with regard to use, scale, enclosure, sightlines, materiality, sound, smell, complexity, and expression. Temporary uses have a different quality than more permanent uses as they allow for more flexibility and have intention of change. These spaces are all changing at different paces and with different influences from the surrounding context. Density and grain of the context affect the spatial qualities as they change over time. Areas are typically more activated by fine and blurred grain of use and people. With different contexts come different uses and people. Each latent
space, therefore, has its own character and experiential qualities that are affected by outside conditions.

There are four distinct areas of study: West Austin, Downtown Austin, East Austin, and South Austin. Each of these areas has unique contextual qualities of density, grain, and latent spaces.

Many changes are happening in the commercial and office areas of West Austin, as well as mixed use and residential development. This increase of residents and uses is creating activity in the area. Which means potentially more uses of these temporary use spaces. The increase of residents will affect the use of The Hope Outdoor Gallery and Deep Roots Garden.

Downtown Austin is an area which is continually developing more toward the Colorado River. The studied latent space; The Bus Stop; located in the northern area of Downtown Austin, has seen little growth over the past 12 years. The addition of the Capitol bus stop has created a hub of activity at the corner where people wait for the bus. Its proximity to the Capitol makes it a prime location for a temporary use or permanent use. This site has potential as a meeting spot with these high pedestrian traffic areas and the location of the bus stop at its corner.

In East Austin there are five latent spaces which were studied. Overall, the cases are rather similar, all beginning as grassy lots with trees. However, they are currently in different states. The Backyard and The Jamaican are both food truck areas. Although they have different spatial qualities, they share similar character. These spaces provide a weathered and relaxed atmosphere. In contrast to these spaces are The Remnant, The Zen, and The Red Venue have either remained latent or have recently failed as food truck venues. The Remnant is a latent lot which has remained
in its state for 12 years, possibly longer. The Zen and The Red Venue are food truck areas which have failed as food truck venues. East Austin is experiencing more development primarily along 11th St near The Backyard and The Jamaican than along 6th St. The area is being transformed into a Transit-Oriented Development with mixed use buildings. Therefore, flexible open space could become an increasingly necessary amenity for new residents and visitors.

South Austin is the area south of the Colorado River containing Zilker Park and the Performing Arts center. Many large residential buildings are appearing along the river. There are commercial and office buildings concentrated along the major Streets, Baron Springs Rd. and S Lamar Blvd. A low density single family housing area lies south of the latent space, The Picnic. This latent space contains more permanently structures than other latent spaces in Austin, however it is still flexible. It is enclosed by food trucks along the edges, providing access and views to the street. The area is popular in the evenings with a variety of people. As the area gains more residents, the amount of services needed will also increase. While The Picnic is flexible for programmed use, it does not invite users to make their mark or change the space. Perhaps there is room in South Austin for more flexible use spaces that invite different kinds of uses.

The four areas: West Austin, Downtown Austin, East Austin, and South Austin create Central Austin, a varied city with different people, contexts and latent spaces. As the city concentrates its efforts in developing parts of East Austin, West Austin, and South Austin, consideration should be held for these latent spaces, their character and how they contribute in their context. Latent spaces have potential as expressive spaces for individuals and groups to experiment. They create different experiences in the city, reflecting resident occupation and desire.
Chapter 5: Answering Questions of Latent Space

Conclusion:
This study seeks to answer descriptive questions about latent spaces. In order to find out what kinds of latent spaces are in Austin and how those spaces change over time. The spatial qualities are documented for each latent space as a way of identifying the character of these spaces. Context is analyzed through land use data, population data, and Google Earth Imagery to study the effects of context on latent space use and character.

Research Questions:

How do latent spaces evolve over time?

How long do these spaces stay latent?

What happens to latent spaces as they transition through time?

What is the relationship between latent space and its context?

How does the urban context change around transitional latent spaces?

How does density and grain affect the potential of latent spaces?

Answering Research Questions:

The study was able to answer some of the questions more completely than other questions. The study is able to measure multiple cases with a method that encompasses different conditions. The conditions that the study reveals are spatial qualities, uses, and change over time. The overarching question of the thesis is ‘How do latent spaces evolve over time?’ This broad question is answered in part by the study by looking at Google Earth Imagery and Google Street View to
conduct a timeline analysis. The timelines explore the changes of use and elements on the site from 2002-2015. The study's time period is limited by the availability of Google Earth Imagery. This limitation misses out on information before 2002 which is a significant amount of time.

The on-site methods allowed for an analysis of spatial qualities which are important for understanding the experience and character of the site. The character is a crucial part of the study as it also is vulnerable to change. Character is a factor for human occupation of a site. Some sites only seem to change with the season or with minor maintenance such as mowing. Other sites have received a temporary use as a food truck venue. A couple of other sites provide expressive temporary uses such as a graffiti gallery and a community garden. Latent spaces evolve through the seasons, with minor modifications, and with temporary uses. When a latent space is given a temporary use, the qualities of that space change. Understanding how these spaces change and adapt can inform designers about how to respond to temporary uses and flexible spaces.

Building this body of knowledge for future use with an ever changing urban fabric, can assist in the making of temporary use sites where communities can be involved. With a high growth rate, Austin is a prime location for analyzing latent spaces. The city is developing rapidly and spaces remain latent despite all of the change happening. In order to take advantage of these spaces in between uses, Austin needs to understand how the spaces evolve as well as what kinds of spaces exist in the city. Since Austin has a creative culture, they can take advantage of these latent spaces in ways that are varied.

The relationship between latent space and context is one that is intertwined. The context shapes the space and may affect activity levels in and around the site. A range of uses and people creates a more active. One of the sites was developed as a result of changes in the context. It is
part of a multifamily housing development. Therefore without the rise of housing happening around the site, the space may have continued as a latent space before becoming a more permanent space. By looking at the changes off site as well as on site, a connection can be made for a related growth. However, some sites do not see many effects from a changing context but remain inaccessible, latent space. Activity around the site does not mean that it will be used. One case study, The Bus Stop, receives traffic all day from the bus stop and from pedestrians walking from the Capitol. The site remains largely unused except for people sitting and waiting for the bus.

Several areas are growing more quickly than other areas. South Austin, along Barton Springs Rd is developing mostly medium to high density residential. East Austin along 11th St is developing significantly in commercial and mixed use buildings. At the same time, two latent lots have developed identifiable temporary uses. Uses are sometimes of a commercial nature with goods to be sold. Some other sites are programmed for more entertainment or relaxation space. An area in West Austin has also received significant growth over the past 12 years. The location of this growth is along Lamar and 5th St. The growth links with Downtown Austin with several uses such as office, commercial, and residential. This growth brings more people to the area as it begins providing walkable density. The density and grain improvement of this area can affect the traffic of the nearby latent space. More traffic means more potential activity for those spaces as well.

**Improvements and Further Areas of Research:**

The study could be improved with more resources and time. More past land use plans would be useful for looking at grain of uses over time. The study evaluates the addition of
footprints over a period from 2002 to 2015, however it does not evaluate the change of land use. The only land use changes that were determined are land uses that have changed from undeveloped lots to the land use map that was available. More updated footprint maps would also be helpful for determining the change of density. The latest footprint data available is from 2010, which misses a significant amount of recent development for the past five years. The use of Google Earth Imagery was used to compensate for this lack of data, however the study of those images takes much time.

Interviews would be a more thorough way of finding latent spaces and evaluating their uses. Residents of Austin might be able to identify these latent spaces for the researcher. If latent spaces are found, interviews with users would be helpful for studying the implications of these spaces for users. This would provide a more intimate understanding of latent space’s use and how it may have evolved over time from the perspective of the users. A more in depth research could be conducted on the users of the site by documenting people on the site at different times of the day, week, and year. Gehl Architects conduct such research on cities in order to determine how people actually use space. This kind of research would be valuable for the evaluation of use in latent spaces on a smaller time scale than this study approaches.

Implications:

The study seeks to analyze latent spaces at two different scales. One scale is the on-site analysis of character. The aspect of time is harder to evaluate on a level of character and experience unless the researcher is allowed multiple visits over a time space of several years. The study only evaluates the experiences at a snapshot in time. Therefore the significance of change
over a period of a year is not evaluated. Perhaps a prospective study would be the study of these spaces over a shorter time period in order to analyze changes at a different scale. The second scale of study is the scale of changes in the city over a period of years. The advantage for this approach of time at a city wide scale over several years is that connections can be made for the city as a whole. This also allows for the identification of significant areas for latent spaces in the city as the nature of development happens over a long period of time. These are both important scales of observation for understanding latent spaces. The inclusion of a snap shot in time gives a glace for implications of temporary use spaces and their character. An overview of changes in the city over time allows for connections between context and latent space. In order to answer both questions of character and city implications, the thesis meets in the middle of these two scales of study.

The study has also provided a method for further study of latent spaces. The study provides a view of latent spaces in Austin, Texas. With this information about latent spaces, a better understanding of how Austin and its citizens view these spaces is reached. Latent spaces are treated as opportunity for art and food. Many of the sites are geared towards food while a couple of sites also include art. This is also a reflection of the researcher as sites where purposefully selected as an interest to the study.

Users of the study may include designers, researchers, and policy makers. Latent space fits into the image of the city. They reflect values and approaches by a city. Each city has its own approach to these interstitial spaces. Policy makers should be aware of these open spaces in the city, as they reflect upon the image of the city. The use and experience of these spaces should also be known to policy makers who have the ability to change or inhibit the operation of these spaces. The importance of these spaces is the more informal qualities brought about by a more bottom up
design. The ability of people to alter and contribute to their own open space creates a more invested community. (Hester) These flexible spaces are a catalyst for community involvement and expression as well as economic growth and development. The outcome and experience of these spaces is dependent on the values of a city and its people.

As a user of the study, designers understand the implications and opportunities for interstitial spaces. As spaces of experimentation they are a valuable testing grounds to designers. But because designers have a role in the development of these spaces there is a responsibility to understand how the design creates or affects the experience of the space and encourages users. In the case of The Red Venue, food trucks were on the site before the establishment of a perimeter fence. After the fence, no food trucks are present despite the purpose to establish the space as a food truck venue. The space has become designed in a more top down fashion, rather than by people of the space. The influence of design on these space cannot be overlooked. The approach must be flexible while conscious of the experience and context.

This study adds to a body of research for interstitial space while creating a method of further research in other cities. If a body of knowledge were gathered for these interstitial spaces across the country, then the portrait of Austin’s interstitial space can begin to be compared to other cities. Create a network of information of interstitial space to see how other cities approach these spaces.

Interstitial spaces are in cities all over the world. The latent space is part of this typology as a space which is transitioning through uses. As the urban fabric is changing these spaces can remain dormant in waiting for programmed use. The value of these spaces lies in the flexibility for uses different than typical open space. They provide an urban playground where the community can begin to express themselves and shape space. There is a growing interest in the character and
possible use of these spaces in the past few years. As people are encouraged to become makers in their community, these spaces will become more important. Austin in particular has a food and art culture which contributes to these spaces. The opportunity to create at a user level in a city like Austin is important as it becomes a catalyst for growth economically, communally, and culturally.
References:


Rubbings:

Hope Outdoor Gallery
Deep Roots Garden

The Bus Stop
The Backyard
The Red Venue

The Remnant
Sound Studies:

Hope Outdoor Gallery

Deep Roots Garden

The Picnic

The Bus Stop
Photos:

Hope Outdoor Gallery:
Deep Roots Garden;
The Bus Stop:
The Backyard:
The Jamaican:
The Red Venue:
The Remnant:
The Zen:
The Picnic: