PUBLIC REALM USAGE PATTERNS
LESSONS FROM SHENZHEN’S DISAPPEARING URBAN VILLAGES

BY PHILLIP HU

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Thesis Advisor

Eran Ben-Joseph
Professor of Planning, Department of Urban Studies and Planning
Department Head of the Department of Urban Studies and Planning, MIT

Thesis Reader

Lawrence Vale
Ford Professor of Urban Design and Planning, Department of Urban Studies and Planning, MIT
ABSTRACT

Shenzhen’s villages in the city or urban villages are forms of informal settlement that emerged in the midst of rapid Chinese urbanization. For a period of time, both the city and villages mutually benefited from the arrangement where rural-designated urban villages used their unrestricted developmental rights to create an alternative affordable housing option for low cost workers. Recently, as land prices have increased, city leaders and developers have begun redeveloping urban villages as a new source of land supply. Even when the original village cooperative, now corporation, is well compensated, migrant workers must continuously move further away from the city to find affordable housing. The cost of erasing urban village cannot only be measured by figures of relocation costs, rental prices, and potential profits. This thesis acknowledges the value of urban villages as a community and place through its dynamic public realm. The unplanned activities and street life in the village’s alleys and niches include many social and recreational uses alongside necessary economic and domestic uses. The urban village becomes a potential model for a responsive, never-obsolete, flexible structure that allows for a pluralistic approach to understanding cities. The thesis looks at the how both informal and formal spaces in the public realm are used and asks: How are informal and formal spaces used differently? How does public life in a flexible, adaptable public realm preserve affordability and community in urban villages? How does informal public life challenge conventional understandings of the role of public space? Through design, how can the lessons from these spaces be translated in contemporary developments to foster community and public life?

The thesis begins with an overview of existing public realm design recommendations with regards to unplanned activities. A field study in January 2016 provides the primary research data, including observations, time-lapse photography, and informal conversations with public realm users and planning-related professionals. The thesis follows with a mapping and analysis process of building elements, adaptations, and activities that reveals how physical typological elements affect usage pattern. The thesis concludes with design recommendations and possible design interventions that reflect the continuing relevance of urban villages.
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INTRODUCTION
Disappearing Handshake

Shenzhen’s villages in the city or urban villages are forms of informal settlement that emerged in the midst of rapid Chinese urbanization. Among the commotion of the urban village market, sounds of construction and sights of green scaffolding foreshadow the seemingly inevitable fate of these neighborhoods. Urban villages or village within the city (cheng zhong cun) refer to previously rural towns that became engulfed in the expanding city. For the case of Shenzhen, the reverse is almost true, where the city was ‘plopped’ within the original landscape of townships. During China’s economic reform in the 1980’s, Shenzhen was established as a Special Economic Zone (SEZ) to attract foreign investment with a more market friendly and flexible government environment. Around the same time, land started becoming privatized through land leases and ‘rights to use’, though ultimately, urban land is owned by the state and rural land is owned by collectives. Because Shenzhen’s land was designated as rural, the government had to transfer rural land to urban land and pay compensation to the village collectives. The city first transferred surrounding farm land while preserving the town’s footprint, since villagers’ homes were too costly to compensate and relocate. Land leasing for Chinese cities has become an extremely profitable method of generating income to develop infrastructure and to power rapid urbanization.

Villages without agricultural land sought out new revenue streams for themselves. Many villagers became landlords, leasing small apartments in densely packed buildings to migrant workers who work in new factories. With unrestricted or unenforced rights of development, urban villages thus underwent a parallel but
different process of urbanization alongside the formal ‘urban’ fabric. Using the term ‘village’ to describe ‘urban villages’ is misleading, as the editor of one of the few English guides to urban villages, Stefan Al writes.1 ‘Village’ now only refers to the land classification of these spaces while ‘urban’ describes what the town has actually become. These neighborhoods are not old or excluded from the city; rather, they are an integral, dynamic part of the city’s economic machine which responds flexibly to its context.

While manufacturing began moving farther out of the city, the urban villages remained. Urban villages have always been seen by municipalities as a placeholder whose role has become obsolete. Prime central land seems to be going towards dens of illegal activities and low-level migrants instead of the ‘best use’. For housing a class of modern professionals, ‘best use’ includes gated communities, shopping malls, and office towers. Shenzhen has been struggling to find its identity through its rapid growth and currently is looking towards becoming China’s hub of creativity and technology industries. The *Handbook of Contemporary China* describes redevelopment of villages as a ‘last frontier’ for a city’s ‘economic upgrade’.2 Because the central government limits the amount of rural land that can be converted to urban, the natural course of action is to erase the urban village to increase land supply in one of China’s most expensive real estate markets. Cities have begun working with village collectives and developers to redevelop villages for commodity housing and in situ relocation. Mutually beneficial, villagers receive generous compensation and possibly higher profits from higher rents, and the city has assimilated underutilized land back into the rest of the city. The ‘best use’ argument is quite logical and is not only limited to China. Lower income inner city neighborhoods have often been targets for grand city building moves, since political opposition is minimal. Boston’s West End in the 1950’s became a target of a media and political smear campaign, painted as a congested, unsafe, and unhealthy neighborhood. The neighborhood was razed, and a reimagined neighborhood based on best practices replaced it. ‘Rational’ city planning with complex codes, zoning, and models legitimized the emerging technical profession. The demolition of the West End and historic structures such as Penn. Station in New York were later seen as mistakes of a planning culture that did not see value in historic forms and failed to predict the social costs of displacement. Planning has responded with historic preservation districts and affordable housing strategies that seek to avoid future mistakes.

Many urban design decisions are still based on a set narrative of selected facts, values, and assumptions, obscured by bullet lists guised as ‘best practices’. When the district produces a plan titled, “Eight model villages, eight model streets”, we must ask what their version of the ideal means. Designers often begin a presentation or report with a discussion of precedents and focus on the imagery of the object. They then proceed to propose a *tabula rasa*, blank slate redevelopment based on the ‘case studies’ as the solution. The image of the model

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1 Stefan Al, Villages in the City: A Guide to South China’s Informal Settlements (Hong Kong: Hong Kong University Press, 2014).

Figure 1-2
Left: Example of ‘Handshake’ Houses and the active public realm below.

Right: Urban villages are not only different from other villages. Within villages, diverse spaces accommodate a wide range of unplanned adaptations and activities.
street becomes clean, leafy, and without street hawkers running amuck. Beyond studying the urban village, this thesis is part of a continuing dialogue of reevaluating the assumptions different academic frameworks used when confronted with designing the public realm.

Debating views of urban villages work similarly, where groups with varying focuses approach the problem with different methods, values, and assumptions. Both romanticizing the life of the urban village and dismissing its ‘value as a place’ are equally unproductive. The public realm is one aspect of the urban design of urban villages that has not been fully explored and has mostly relied on two opposing narratives rather than careful documentation. One version of urban villages includes descriptions such as: dark, dirty, “eyesore, scar, ill, or even cancer of the city.” The second version of the urban village includes descriptions such as: lively, active street life, and preserving ‘long term identity’. While Villages in the City presents an excellent, balanced discussion of the conditions of different urban villages, its praise of the active public realm in the case studies ends at the neighborhood scale and a few select street-level photos. Its in-depth discussion of building interiors highlights a surprising modular process to the rooms and uses. The thesis seeks to fill in the gap with a study as detailed as the documentation of building flexibility. A focused public realm study that looks carefully at patterns in both Chinese urban village and formal space is needed, using methods derived from Gehl, Whyte, and People Places.

As the public realm is the face of the neighborhood, where the city interacts with the buildings, Gehl writes the physical environment must be “a factor that influences the activities to a varying degree and in many ways.” Within villages themselves, there are specific relationships between physical elements and activity at the human scale, such as benches, trees, setbacks, and porches. The thesis uses the urban village public realm as a platform to build upon and reevaluate both previous studies of public spaces and previous studies of urban villages. There are trade offs of elements in the urban village’s public realm in different models of measuring ‘success.’ In simplified terms, active, recreational, and social might be one model but active, functional, and individualized might be another. Hence, the primary research question is in two parts, asking what model we use to measure public realm success and what combination of elements leads to different models of success. Time is increasingly running out to determine the fate of urban villages. Cities around the world are also facing diverse challenges while public realm design still follows one-size-fits-all, non-contextualized models.

The thesis aims to reveal the ways urban villages contribute to an unconventional public life for villagers, migrants, and their neighboring urban dwellers. It also aims to explore the value of a contextual public realm study as an updated framework to informing urban design strategies. The thesis is limited by its chosen emphasis on studying the direct relationship between the built environment and usage in a specific typology. Thus, the conclusions from the thesis cannot necessarily guide

4 Al, Villages in the City : A Guide to South China’s Informal Settlements, 5.
5 Jan Gehl, Cities for People (Washington (DC); Covelo; London: Island Press, 2010), 11.
new developments in Shenzhen, let alone inform cities in different international contexts. The missing component that relates usage with rules, regulation, participatory design, and process are necessary before a designer can be more confident that these physical elements can recreate ‘the urban village street life’.

**THESIS STRUCTURE**

Chapter 2 traces through a history of the different frameworks, values, and motivations that inform public space design. A quick discussion of pre-modernism methods of urban design is followed by a short critique of modernist methods to urban design. The second section traces different responses to the modernist model of urban design, focusing on the user experience rather than large scale, abstract ideas. This is followed by a set of research questions that draw from the applicable frameworks that examine public realms.

Chapter 3 goes further in depth on current understandings of Chinese urban village and formal public realms to initially conceptualize the cultural context. City-wide scale factors that influence urban villages and other planning pressures in Shenzhen reiterate the need to think of urban villages as part of the whole system of urbanization rather than an isolated issue.

Chapter 4 chooses three primary case study villages in Shenzhen and applies a time-lapse observational study to a sample of the villages’ public realms to answer how they are used. Physical elements related to differences in use are defined and evaluated. The chapter ends with a comparison of the three case studies with formal public realm examples and other less-intensely studied villages to establish whether the results are replicable in different contexts.

Chapter 5 begins with a cross-examination of the design conclusions from the public realm analysis with established literature. The goal is to establish the differences between the new analysis from current, international ‘best practices’ for public realm design, relating the temporality of urban village spaces as a possible key to its role as a space in transition. The section then offers design recommendations. The chapter transitions into a broader discussion of urban villages in the temporal dimension, as a place in constant transition and what that means for its identity as a place. The chapter ends as a call to action with recommendations for future study and design research.
HISTORICAL CONTEXT OF PUBLIC REALM ANALYSIS
CHAPTER 2 | HISTORICAL CONTEXT OF PUBLIC REALM ANALYSIS

The design of the public realm exists in the intersection of urban design, architecture, and landscape architecture. Consideration for the design of public space and the public realm is as old as the buildings it surrounds. Arguably, the city is shaped as much by its monuments and buildings as it is by its streets, market spaces, plazas, and parks. The first section of the chapter discusses the history of the study and design of the public realm as a larger question about how the role of these spaces in cities transformed throughout history. The second section analyzes the responses to modernism as alternative readings of the design and usage of the ‘everyday’ public realm.

PRE-MODERNISM ROLES

SYMBOLIC ROLES

The function of public spaces in societies has shifted dramatically over time and differ by culture. Generally, pre-industrialization, notable, and surviving public spaces were often shaped by obvious political and spiritual motives. In the context of early Chinese cities, the political and spiritual were entangled, since the organization of the city’s key structures had to conform to principles that exerted the emperor’s Mandate of Heaven.1 The Ottoman palace emphasized the sultan’s omnipresence power over his empire. Through screened windows, towers, and sectional differences, the sultan became the ‘wandering eye’, and palace inhabitants never knew if they were being watched.

2 The Washington Mall acts as a palimpsest of American history through the arrangement of its many monuments. While the previous emphasis was on the monuments themselves, Skidmore, Owings and Merrill (SOM)’s plan “demarcated the essential contours the Mall retains to this day.3 With minimal formal ornamentation, the major landmarks on the Mall now expressed a streamlined ‘abstract monumentality’ that many observers believe best synthesizes and arranges the monumental and populist influences always vying for expression on the Mall.”4 Furthermore, Maya Lin’s Vietnam Memorial solidified the importance of landscape. The memorial sinks below the surface of the ground and “demands that the viewer acknowledge the vast expanse of space it gestures toward - suggesting that the meaning of the spaces between the monuments, memorials, and landmarks on the Mall are themselves portentous and deserve explicit acknowledgment.”5 This model of contemplative public realm design imparts a higher level symbolism, from power to democracy, on the city’s public realm.

WELLNESS AND SOCIAL BETTERMENT ROLES

The role of everyday public spaces such as markets, streets, and parks became of heightened interest and evolved along with the beginnings of planning as a practice. During industrialization, cities were congested and polluted, and the city’s elite were concerned about the social unrest that would emerge from the vice and illness. The everyday public realm became a social transformative tool, since a good environment was thought to also ‘civilize’ its users, mostly recent rural transplants. Central Park’s

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1 Victor Cunrui. Xiong, Sui-Tang Chang’an : A Study in the Urban History of Medieval China (Ann Arbor: Center for Chinese Studies, University of Michigan, 2000), 41.
4 Ibid., 527.
5 Ibid.
Bethesda fountain celebrated the completion of the Croton Aqueduct in 1842 that connected New York City to sources of fresh water. Fresh water access was critical for the mostly brackish New York City area which was plagued by water-borne diseases. Burnham’s Chicago plan and design of the Chicago World’s Fair reflected the dominant Beaux-Arts urban planning paradigm. The public realm was shaped by wide diagonal boulevards and monumental civic sites. The lakefront was preserved for all people’s access. At its core, the plan was to systematically order the city, reducing congestion and removing ill vice elements of the city. In Boston, the Public Gardens was an attempt to use rigid design and park rules to better civilize its newcomer visitors. Unlike the open and free Commons, activities were more restricted, both physically and legally. Urban design and planning of the public realm was largely about imposing aesthetic control and efficiency as a social mechanism to gradually incorporate the masses of urban newcomers.

EFFICIENCY AND MODERNISM

Though the aesthetic changed drastically, Modernism through the mid-20th century largely had the same goals as Beaux-arts as a mechanism to impose order and efficiency in a new technological age. Modernism further sought to integrate the design of open spaces, roads, and the public realm, especially from the user’s point of view. Corbusier’s classic example of the Radiant City works at multiple scales, from the housing unit to the pedestrian and to the car. Modernism in the mid-century embraced the automobile as the dominant unit of the city, and all elements responded to the new scale. City blocks increased dramatically in size, some becoming superblocks. Superblocks in Barcelona, as thought of by the International Congress for Modern Architecture (CIAM) in *Can Our Cities Survive*, elegantly divided the public realm of the automobile and pedestrian and cleanly separated uses. Pleasant pedestrian circulation weaved through the superblock of bar-shaped buildings while automobiles could move without inhibition in organized grids of work spaces, living, and recreational spaces. The new vision of the public realm was freeing and showed an efficient city without the congestion of older cities. Even though approaches during this time differed, such as the three classic examples, Howard’s Garden City, Corbusier’s Radiant City, and Frank Lloyd Wright’s Broadacre City, all of them envisioned an efficient public realm that enabled its occupants to have more free time to engage with recreational, civic, and cultural activities in beautiful green spaces or monumental, functional buildings. The public realm of the city that responded to liberating technologies was a blank, green slate for residents to occupy. The emergent model became known as rational planning. Rational planning, such as the Chicago Area Transportation Study in the 1960’s, used engineering, quantitative models to project growth and systematically output recommendations, free of possible political influence.

Vision of the efficient city and practice often differed in the final results. Gehl writes on modernist approaches to the public realm:

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“The consequences for the social environment were not discussed, because it was not recognized that buildings also had great influence on outdoor activities and consequently on a number of social possibilities. No one wishes to reduce or exclude valuable social activities. On the contrary, it was thought that the extensive grass areas between the buildings would be the obvious location for many recreational activities and a rich social life. The extent of which these visions of the function of green spaces as the unifying element in building projects were correct was not challenged or investigated. Not until twenty to thirty years later, in the 1950’s and 1960’s, when the big functionalist multistory residential cities had been built, was it possible to evaluate the consequences of a one sided physical-functional planning bias.”

Boston’s urban redevelopment of the West End was an example of the shortcomings of applying modernist principles in existing cities. By the 1950’s, the West End was portrayed as decaying slums, and leveling the original urban fabric for super blocks was politically feasible at the time. Urban renewal at the massive scale was possible because funding was aided by the federal Housing Act of 1949 and was accompanied by popular urban planning theories. Through redevelopment, a series of unpopular Government Center public spaces replaced an energetic yet ‘immoral’ Scollay Square. City Hall Plaza was modeled after Siena’s public plaza, yet copying the form failed to copy the energy and context of the plaza’s origin. The public realm of the development and of accompanying housing projects were not liberating as envisioned and instead were underused. Designers were more concerned about the theoretical, “concerned more with developing universal axioms and meaningful methods for analyzing form than with exploring the more concrete issues of casual use of real space by ordinary people”

RESPONSES TO MODERNISM

Modernism in practice marked a disconnect between the framework of measuring success and reality. Efficiency in mobility and green space expansion was the key metric in urban planning, and urban thinkers, including sociologists, journalists, planners, and designers, began to question this metric. These alternative methods of thinking include social analysis, psychogeography or spatial memory, pragmatic use-based solutions, and everyday observational history. While the categories have general labels, by no means are works constrained by these approaches; instead, these thinkers often blend different approaches.

SOCIAL ANALYSIS

As an outsider, Jane Jacobs wrote an easily accessible foundation to urbanism from a social functional perspective in her work, *The Death and Life of Great American Cities*. Instead of understanding cities from a technical, rational planning model, Jacobs sought to understand the public realm from the daily ‘sidewalk ballet’ of its inhabitants. Her observational approach has a simple research question:

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how do cities actually function at the neighborhood scale and what is the purpose of the public realm for its users? Her method uncovered the problems created by the assumptions from rational planning. Segregated uses, while orderly in a plan and mobility model, created monotonous spaces that “repel life.” Beyond advocating diversity of uses in a neighborhood, Jacobs also began to connect physical factors with the social behaviors she observed; the livelihood of a sidewalk depended on its unofficial deputies, those who watch the street as a past time or where it is convenient. These deputies, from nosy homemakers to storekeepers, need a visual line to see passageways and streets. The street front with active, diverse businesses of differing turnovers would ensure that there would always be crowds of people in the public realm.¹¹

Such a small but vital detail makes a substantial difference as she noted in the opening up transformation of a problematic Brooklyn housing project, creating sight lines into stairwells, allowing diverse activities on its lawns, and thus reducing safety problems. Jacobs’s work was impactful because it connected social behavior to specific design features from the perspective of a network of interdependent urban user’s experience rather than treating each user as an individual unit that moved through the city.

PRAGMATIC APPLICATION

Designers and other thinkers began to take a closer look at the spaces cities already had, a continuing or parallel thread to Jacob’s work. The main motivation for this set of designers and researchers is, succinctly explained by Whyte is: “the book is about city spaces, why some work for people, and some do not, and what the practical lessons may be.”¹² The source material comes from “first-hand observation.” The major framework for these works depends on close and frequent observation of a space to find a physical element or condition connected to usage pattern, and then making a series of practical recommendations.

Whyte in the 1980’s explored small public spaces in New York during a great building boom of density bonus public spaces. Office skyscraper developers managed to negotiate greater heights and densities if they provided open space as a public benefit.¹³ Whyte and his Street Life Project Team sought to find out why some of the “world’s most expensive open space” was lively or dead, particularly focusing on the physical elements, user experience, and environmental conditions. Whyte’s time-lapse videos of the spaces were a critical tool to observe how a public space’s performance changed throughout the day. His mapping technique, a player piano of activity on Seagram’s plaza, shows that good public space is not lacking even at peak time, since people and capacity tends to be self leveling. Whyte’s research framework investigated how a specific type of urban public realm works, looking at where users go, what they do, and how they interact with other users. Though much of his work is qualitative, a large amount is also quantitative, comparing number of users versus area of a park or amount of seating.

Jan Gehl’s work studying Copenhagen’s and other city’s public realm follows a similar


¹³ Ibid., 14.
framework. Gehl’s *Life Between Buildings* is only one example of his many works that makes recommendations to public realm design through the lens of user experience. The book outlines essential factors to a successful public space, starting by defining urban public activities. From the study of activities, Gehl begins to discuss an urban-neighborhood scale response to modernism’s approach to urban design. Urban spaces can be arranged either to disperse or assemble, integrate or segregate, invite or repel, and open up or close in, each an urban site planning strategy with different outcomes. These factors make the general stage where ‘props’ then fill in the space where users occupy. From there, Gehl then discusses urban details from an experiential perspective, where activities are more closely linked to a particular physical element. These physical elements include ramps, steps, how the building meets the public realm, soft edges, street furniture such as bollards, and sitting places. The examples are drawn sporadically from multiple cities, and the book acts as a general guidebook on how to effectively design both neighborhood scale spatial arrangements and specific physical elements as a generalizable successful public space.

Clare Marcus and Carolyn Francis’s work *People Places* is a highly organized set of design guidelines and supporting case studies, based on user observation. The work is more concrete than Gehl’s works in recommendations and more comprehensive than Whyte’s studies. The organization of recommendations follows a hierarchy: typologies of public space; a discussion of previous literature on the study of the space; specific design and programming recommendations, such as location, size, visual complexity, uses and activities, microclimate, boundaries and transitions, and amenities; then followed by case studies which are organized similarly. The framework is easily accessible for a designer who needs to quickly find a reference. The book even provides a checklist of questions such as “is the plaza sited to receive maximum, year-round sun-shine?” for each typology and design factor that allows designers to self-identify where their current design can be improved. 14 *People Places* provides an observation-tested toolkit of design constraints based on real world users rather than the problematic modernist “universal axioms and meaningful methods of analyzing form.” 15

**PASSIVE OBSERVER EMPOWERMENT**

Urbanization as a process has a history, and many responders to post-war American urbanization sought to trace that history or memory through on the ground perspectives of everyday landscapes. They seek to abstract complex processes into more understandable patterns that empower the urban dweller, user, or reader as the ones to uncover ‘truths’ of the consequent urban landscape from complex processes. These works de-emphasize solutions for urban problems like the practitioners but instead seek to make the complex city legible as a force of individual, positive change.

Kevin Lynch’s *Image of the City*, looked at the user’s experience in the city and used mental maps as the tool for investigation. His analysis processed the mental maps and discovered each shared similar patterns in how cities are organized to a user, citing five elements. The
abstraction of an experience into a physical condition, the edge, path, district, node, and landmark, makes a similar analytical leap as Jacobs. Lynch’s investigation showcases how even the development of a largely unplanned city, such as Boston, still followed a rule set to create user legibility. An inhabitant in a legible city can navigate her own experience based on her own daily life. Lynch’s work showcased a previously unexplored, organic logic to urban planning, vastly different from the plan based methods of rational planning. The work places the user as an authoritative voice on a city’s organizational identity or legibility rather than government policies or plans.

Grady Clay’s, Close Up How to Read the American City and John Stilgoe’s Outside Lies Magic analyze the American landscape, some outside traditional urban centers. Both works attempt to identify an American landscape with a generally more objective perspective compared to Jacob’s dismissal of American suburbia. Clay, a journalist specializing in urban planning issues, first notes an observation of a set of behaviors, a physical element, or urban arrangement, and then explains a deducted basic rule that propagated the pattern or anomaly. “Why does this happen” interests Clay less than “Why do such things as these happen”. Clay’s thesis emphasizes a toolkit of terms with which the every day citizen can understand the processes through observation to test the complex and abstract process of urbanization “against ordinary, everyday experiences.” This toolkit distills the complex planning process and urban machine into its result: attractors such as epitome district and fixes; repellers such as sinks; edges or paths such as beats, strips, fronts; and spatial segregation or organization such as stacks, turfs. Similar to Lynch, defined qualitative urban concepts at the observed stage, rather than policy or zoning, empowers the reader to make their own interpretation of the city.

John Stilgoe’s Outside Lies Magic, is a loose collection of historical narratives from the reader, the urban explorer, discussing the policies, technology, and other forces that transform the urban landscape. Examples include how some Main Streets do not have street trees due to the limitations of firehouses while recreated tree-covered small towns reference Disney’s Epcot and were part of a larger movement of historical preservation. While a reader will not know why a certain street does not have street trees, the process proposed by Stilgoe allows the reader to draw from a larger scale research to explain the smaller scale phenomenon as a pattern.

The passive observer gains agency over his observations that explain real, physical ‘artifacts’ with an abstract concept at a higher scale by using external research.

UNPLANNED USER INTERVENTIONS

Clay, Stilgoe, and Lynch all describe how legibility comes from the reader, explorer, or user who asks questions, sees patterns, and explains a complex process in abstracted terms. Moving beyond user empowerment as a passive observer, other works seek to explain aspects of urbanization from the direct actions of the users themselves.

Michael de Certeau’s *The Practice of Everyday Life* examined how people individually interpreted mass culture to reassert themselves against established rules and social practices. When given a set standard, people creatively change the meaning of utilitarian objects, street plans, and cultural rituals to accommodate to their own life. The work sought to give agency to the consumer and change the notion that the consumer is passive and only able to follow a given ‘mass culture.’ Even by redefining ‘consumer’ as ‘user’, de Certeau asserts the importance of individual decisions borne out of the creative ingenuity between gaps in the established institutional or corporate framework. Through this work, a connection between a user’s action and ideas of tactics, opportunities, and territory, opened up a more fine-grained study of user everyday behavior as individual expression or subversion of established rules.

Although also trying to create a framework to describe American urbanization, Jackson’s *Vernacular Landscapes* takes a less ‘everyman’ approach than Clay, Lynch, and Stilgoe’s works. His process first defines ‘vernacular’ as a “beauty derived from the human presence.” Jackson identifies an “involuntary, reluctant sort” of mobility and change as the driving factor behind the vernacular instead of any idealistic aesthetic moral. The landscape is “not the expression of restlessness and search for improvement but an unending adjustment to circumstances” or “common customs and of an inexhaustible ingenuity in finding short term solutions.” The vernacular landscape is thus a process of makeshift adaptations that slowly evolve, become obsolete, or become permanent. Jackson’s description of vernacular in contemporary America emphasizes a reconnection to a “primal idea of landscape” where “indigenous organization and development of space serves the needs of the focal community.”

Karen Franck and Quentin Steven’s *Loose Space*, an expansion on Chase’s *Everyday Urbanism*, describes the ambiguous relationships between users and public space through a collection of essays that are organized as appropriation, tension, resistance, or discovery. *Loose Space* seeks to highlight ‘informality’ where “people break free of intended uses and established meanings, break free of restricted forms of comportment and movement.” Looseness or informality occurs when a user redefines a physical element; in the action of skateboarding, “what is loosened is the user’s understanding of how the physical environment can be combined .. to produce new spatial experience.” To be more specific in definition, appropriation has neutral meaning and refers to the unintended relationship between a user and the physical element (a street tree, a ledge for seating). Discovery is a variation on appropriation that takes a deactivated physical element and repurposes it. Tension occurs when the act of appropriation begins to substantially disrupt the intended
use rather than coexist or its image does not fit in an authority’s image. Resistance is less applicable to the formal, stable spaces as it is action to push the tension in one way or the other, particularly describing protecting the marginalized user, but it appears in the transforming urban villages, in the process of being redeveloped.

Looseness exists on a spectrum and occurs in both designed and undesigned spaces, leftover spaces and defined spaces. Moreso, the series of essays show the cultural, commercial, social, and other possibilities of looseness or what happens when there “is an absence of the determinacy which is common in place types with assigned and limited functions.”24 The emergent activities are “not anticipated, have no other place, or that benefit from a relative lack of control.”25 Lastly, loose space is valuable because it produces diversity despite being decried as disorderly. Disorder is defined by the controlling forces, the city managers of a plaza - a street might be too congested with the overlap of unintended and intended activities or an officially abandoned site “is ‘wasted’ because it is not generating its ‘highest and best’ use.”26 Efficiency maintains the status quo but these “risk and perhaps wasteful” spaces in the short term “are also a key source of sociability, inclusiveness, diversification and growth.”27 Jeffrey Hou’s anthology Insurgent Public Space extrapolates on tension and resistance from Loose Space by arguing the need for unintended uses to resist control and privatization. Hou references Mitchell, “it is through the actions and purposeful occupation of a space that it becomes public.”28 The vignettes of unintended everyday uses “focus on the new possibilities of public space and public realm in support of a more diverse, just, and democratic society.”29 Through different modes of appropriating, reclaiming, pluralizing, transgressing, uncovering, and contesting, unintended uses represent a “struggle over rights, meanings, and identities of the public realm.”30

The value of looseness, insurgent public space, and informality is that they celebrate and study the ingenious, unintended uses for space, how users feel safe enough to take temporary ownership of a space to express themselves or improve their lives. Loose Space adds a new dimension to space planning, to not completely shun the risks of looseness and to embrace and balance the emergent possibilities.

The role and understanding of the public realm has shifted dramatically since rational planning’s efficiency-based models. It has also shifted away from idealized, aesthetic, theoretical forms or power structures. Instead, it has branched into far more angles than just from analyzing casual, everyday use as the previous works have done. For example, landscape urbanism seeks to integrate natural processes and flows into spatial design, thinking of cities as urban systems of metabolism. But through this framework of ‘everyday urbanism’, urban villages provide unobserved value that efficiency minded, rational planning based on codes and policies can easily miss. Continuing the work of the ‘pragmatists’ and ‘unplanned

24 Ibid, 17.
25 Ibid.
26 Ibid, 23.
27 Ibid.
29 Ibid, 12.
users’, the thesis’s research frameworks prioritizes casual user activity patterns in the public realm that asserts a new perspective of the ‘hidden in plain sight’ social and functional value of public realm space. With a reference frame to connect public realm activity to urban artifacts, the research method draws heavily from the agency of the ‘passive’ urban reader to formulate patterns, narratives, and meanings of the city.

RESEARCH QUESTION, ANALYSIS METHODOLOGY AND FRAMEWORK

Previous studies of the public realm have created a research framework that link the user’s behavior with the physical design of space. Public space is defined by its context, physical elements, rules, and uses. The first three will be defined as non-user public realm factors. All these factors might influence one another and feedback. A neighborhood’s land value might rise significantly with a redesigned park, influencing more development in the neighborhood and bringing new groups to the park. A high-crime context might cause safety and vandalism problems in the park which would then discourage many users, lowering property prices in the neighborhood. Vendors or performers using a space might provoke plaza management to enact new rules, removing a reason many people went to the space. Thus, observational research into the specific relationships between these factors is entangled and certain connections might have to be inferred. The goal is to extract and explain the key causal relationships between the three non-user factors (context, physical elements, rules) and use.

As an example of the framework, in People Places, a study of San Francisco’s Union Square describes its major physical features and how those features affect how people use and view the public space.  

UNION SQUARE

Location and Context: Shopping district and financial district in downtown San Francisco, with good access to public transit. It has streets on all sides.

Arrangement: Rectangular, formal, and symmetric, with an outer belt of lawns sheltered by box hedges and by level changes. Some lawns overlook busy streets. Entrances are on the corner.

Scale: City block in size, subdivided into smaller areas on the outer belt.

Amenities: Variety of seating options, including benches and ledges.

Rules: The plaza is publicly owned unlike other private spaces downtown and is tolerant of the diversity.

Use: Outer belt spaces are used for activities needing more privacy such as napping. Other intimate spaces allow for groups of male regulars to congregate. A sloped lawn allows sitters to watch the traffic on the street. Open areas allow for many seated activities and special events.

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Simplified and summarized from the book, the framework describes the context, the physical elements of the space, and the rules of a space. Within the description, these factors are linked to allowing or encouraging the resulting uses. The context provides the feed of users to the space, given the space’s catchment area and accessibility. The physical elements of the space encourage, allow, or inhibit different users with diverse reasons for using the space. Rules, either formally written down or socially agreed upon, further encourage, discourage, or forbid different users and uses.

In the context of urban villages and the work of *Loose Space*, an additional factor is added between the three non-user factors and use. Often in these types of spaces, a user needs to make significant adaptations. These adaptations range from the simple act of bringing one’s own furniture to installing make shift structures. There is a degree of ambiguity between significant adaptation and use; for example, would a picnic basket and blanket be considered a significant adaptation? Adaptation, based on the definition in *Loose Space*, is the degree of how someone can alter the space to suit their needs. For the purpose of the study of urban villages, a significant physical adaptation in the public realm is one that fulfills one or more of these criteria: not intended, semi-permanent, or regularly installed. Under these criteria, a family picnic on the lawn in the park would be considered a use, since a picnic is temporary and most likely intended. But a vendor who sets up a mat or cart of merchandise on the street would be considered to a degree a form of adaptation. In the case of Union Square, though not a physical alteration of space, the regular groups of men from the nearby residential hotels, their regular use of certain spots becomes an adaptation or claim of territory as their ‘living room.’ Had they brought a cooler, lawn chairs, and a portable radio, its case as a physical adaptation is stronger. Adaptation is on a gradient depending on how permanent or regular the installation is, whether on an hourly, daily, or weekly scale.

This last example is crucial because it hints strongly at a relationship between adaptation of space and a user’s territory or claim of public realm space. Though the space is publicly owned, a user’s almost permanent, regular presence creates a social claim on the space. A user feels safe to put enough effort into slightly altering the space for their need. A vendor would not set up a semi-permanent shop in a location if she knows she will be told to leave every half hour. A vendor on foot carrying his merchandise would more likely be able to sneak in a few sales before being shooed away. A significant adaptation of space can also be described as a user’s claim of territory, a belief that they can safely bring their physical adaptation without fear of harassment.

The established framework of relating these different non-usage factors (context, physical features, and rules) to adaption and use helps answer the broader question of how the urban village’s public realm is used. Usage is described by the diversity of uses, who the users are, and how much activity happens. Four research questions pertaining to the urban village’s public realm emerge:

(1) How are different types of spaces in the public realm used, given the different
permutations of significantly impactful non-usage factors: context, physical features, and rules?

(2) Given a context, what physical design elements of buildings and the public realm impact user adaptation of space and use of space in the public realm?

(3) How do non-usage factors affect the temporal balance between privately claimed semiprivate (but not necessarily owned), semipublic space, true public space, and right of way in the whole public realm?
SHENZHEN’S URBAN VILLAGES
CHAPTER 2 | HISTORICAL CONTEXT OF PUBLIC REALM ANALYSIS

A mix of policy, economic, planning, and social factors culminated in an ‘urban village’ city building process in South China, and the quality of the public realm is only one output of the process. The ‘end product’ of urban villages before stricter regulations ‘freeze’ development vary substantially based on its distance from CBD, date of development, and land use context. Looking towards the future, many major cities seek to reinvent their image from manufacturing powerhouses to the next Manhattan, and urban villages are one of the “three olds” that need to be erased. After reaching peak development, current and future efforts to redevelop, improve, and integrate urban villages into the rest of the city also factor in how the public realm is used. As the physical and political space shifts at different times, the documentation process can observe the effect the development and redevelopment process has on the public realm at different chapters of the urban village’s life cycle.

THE POLITICAL, ECONOMIC, AND SOCIAL BACKGROUND OF THE URBAN VILLAGE

Urban villages or, directly translated, villages within the city (城中村) are previously rural villages that were later engulfed by urban development. Stefan Al and other scholars all describe the process largely from a mix of political and economic forces. A distinction in land designation between ‘rural’ and ‘urban’ created a divide between development regulations. Cities grew rapidly in the 1980’s, but could only partially convert rural land to urban land. Compensating and relocating villagers from their homes was too expensive, so cities allowed villages to continue existing for the time being. Because villagers lost their main source of agricultural income, they began consolidating their wealth to invest in their own factories and danwei housing for incoming workers. Eventually, more modern factories were built on urban land, and small village plots were literally extruded to ever increasing heights to house manufacturing workers and later service industry workers. The original, pedestrian-scale alleyway becomes disproportionately narrow to the 7 to 8 story towers that only leave a narrow strip of light into the public realm.

Beyond the basic mechanics for the growth behind urban villages, Stefan Al argues “for the value of urban villages as places.” Instead of wrongly perceiving them as slums, “a closer look reveals that they offer an important, affordable, and well-located entry point for migrants into the city.” Looking beyond stereotypes and ‘dirtiness’, these villages have become vibrant, self-sustaining, dense, walkable, mixed use communities. Even in villages that have wider alleys for cars, these streets are not thoroughfares and are mainly used for parking before walking ‘the last mile’ to the final destination within the village. Villages are not islands and its occupants and neighbors engage very closely and contribute to the overall city’s growth and development. China’s hukou residency status policy restricts access to basic services such as health care and affordable housing for rural migrants seeking

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1 Al, Villages in the City: A Guide to South China’s Informal Settlements, 1-9.
2 Ibid.
Urban villages provided a solution: cheap housing outside of factory dormitories in a central urban setting, filled with retail and service amenities such as village operated clinics, schools, and security. New rural transplants circumvent the hukou process to have better access to the services the village and cities offer, eventually assuming an ‘urban’ identity themselves.

New entrepreneurs take advantage of lower rents and looser building codes to set up businesses otherwise impossible in the city. For Shenzhen, migrants and recent college graduates came to the new Special Economic Zone (SEZ) in search of the ‘Shenzhen Dream’ of entrepreneurship and opportunities in a newly deregulated space with access to global markets. Urban villages became an integral part in helping Shenzhen, once a collection of rural towns, after economic reform in the 1980’s, develop into a global manufacturing and services player. Shenzhen itself was an urban experiment in an informal space where new factories where the decentralized ownership sparked private entrepreneurship and foreign investments, much of it initially from huaqiao or overseas Chinese in Hong Kong and Taiwan. A walk through Shenzhen’s Hua Qiang Bei electronics market is a cross section of small businesses specializing in electronics at all stages of the supply chain, from buttons and switches to hover boards. Urban villages housed migrant workers to work in factories, but other populations followed with their own

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4 Mary O’Donell, interview with author, January 29, 2016.
ideas, bringing a cosmopolitan diversity of skills, cuisines, and cultures to a new city that was still navigating its own identity.

VARIABLES IN THE DEVELOPMENT OF URBAN VILLAGES

Despite sharing this simple economic and political process, the resulting collection of urban villages across China do not fit neatly within one typology. Stefan Al hints at the process, describing the heights of buildings in the village as a “barometer” of their impending demise. During a tour of Hu Bei village, a Shenzhen urban designer (Fu Na) revealed distinct development stages in one village. During early redevelopment stages, much of the homes were 3 stories or lower, narrow alleyways, and a few open plots, described as medium-density stage redevelopment. Land was allocated based on households, and many villagers subdivided their families to gain more property to develop on. Between the mid-eighties and nineties, some of the new housing resembled danwei midrise dormitories around new factories, since that was the typology of housing most easily accessible and built. By 1992, much of the new development redeveloped the small plots to resemble the final form today, extruded buildings that maximize interior space, described as hyper-dense inner city villages. At the threat of redevelopment, villagers scramble to add even more stories to receive more compensation. Urban villages are not a static urban object. Instead, they have constantly been reinventing themselves, using the most efficient methods possible. Many of the villages have buildings that are remarkably similar to each other, from tile facades to morphological form, and borrowed quite heavily from vernacular archetypes, sharing material sourcing and rough construction documents between contractors. This model of construction could be explored more but seems to parallel the process of how new electronics proliferate; an NPR Planet Money journalist tried to trace the origin of the ‘hover board’, discovering product development often is a result of a ‘network’ of inventors who share ideas loosely through casual encounters. While construction is much more low key, the ubiquitous construction techniques suggests that building was another informal process based on networks and relationships between villagers as individual landlords and developers.

Earlier villages developed along new factories and urban development, and the change becomes evident the farther away the village. Villages close to the CBD were developed earlier and are the densest and villagers in the outskirt were still in the process of growing until stricter regulation began to restrict development in 2001 through new municipal policies. The collection of villages reflect and adapt to the changing function needs around different job centers. Variations due to different village management also exist between villages within the same developmental-period typologies. Village quality of life thus varies in sanitation, infrastructure, crime, and building quality. Because developmental patterns and quality of the environment-public realm varies between villages, the selected sample of villages cannot represent the reality of all villages. Rather, the final sample of studied villages act as a potential case study that highlights positive aspects of the selected typology of urban village.

5  Al, Stefan, 5.

THE CHANGING URBAN VILLAGE: REDEVELOPMENT AND INTEGRATION

The reality for most urban villages is redevelopment. Critics of urban villages range from the ‘Dickensian’ to others who are genuinely concerned about the future of rural migrants and their place in the city. A ‘Dickensian’ view of urban villages resembles the same attitude modernist planners had looking at the West End in Boston as urban blight in need for total redevelopment. Yan Song in a housing study of adjacent urban owners found that villages, even in varied conditions, were disamenities and lowered land prices. The paper presents a dilemma where redeveloping or improving villages are largely ineffectual, since planning would displace migrant workers who power economic growth through labor. But in the long run, the concentration of urban poor negatively impacts the neighboring city, showing villages are not yet assimilated into the urban fabric. On a more optimistic note, Liauw and the general tone of Villages in the City, suggests redevelopment should be tailored to the condition of the village. Newer and healthy inner city villages should be incrementally improved, and older, dilapidated villages with more problems should be cleared for new development and reprogramming. All parties agree that the current redevelopment model is largely imperfect in capturing the social cost of eliminating urban villages, particularly for migrant workers. While villagers can receive compensation or redevelop with retained ownership as a shareholding company in Shenzhen’s Huang Gang and Guangzhou’s Liede Villages, migrants are left out of planning discussions.

A few different models of redevelopment have emerged and are broadly subdivided by: direct government redevelopment, self-village redevelopment, and urban village environmental upgrade. Yet throughout different typologies of Chinese housing, hutong to urban villages, Liauw mentions a common cultural tendency for ‘communal living’. But the external shock application of a new model of modernist superblocks and building from codes designed

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8 Liauw, “Village-in-the-City as a Sustainable Form of Social Housing Communities for China: A Tale of Four Villages in Shenzhen”, 54.
for infrastructural efficiency, threatens the thread of Chinese life. Furthermore, a homogeneous structure is also counterproductive to fast paced technological changes in mobility, communication, and patterns of living and working. Current city building practice is critiqued by Miao Pu as a short term grab at “modern window dressing” and unresponsive to lower and middle income daily needs. Because projects are built to satisfy growth numbers, they are often poorly planned. In new open spaces, largely built in administrative or office centers, use is discouraged by over regulation. Privatization of edges and spaces discourage use as well through blank walls and poor ground floor amenities, similar to the many plazas Whyte observed. Sometimes, parking even causes sidewalks to fully disappear. Gated communities restrict pedestrian flow and social life to ‘faux’ open spaces. Broad sweeps destroy successful spaces in an idealization of redevelopment for political and money-making goals. Instead of a binary strategy, redevelop into a modern ideal or leave unregulated, a middle ground sets more tailored, incremental regulations to address real problems of sanitation, pollution, and safety.

Urban villages throughout their dynamic development history have always been a mechanism for a collective of individual actors to take surprising control over the shape of their community. Expression through the shaping of buildings has been studied extensively, but an understanding of expression through the public realm is equally needed to inform upgrade and redevelopment strategies to address the wasteful problems of current Chinese urbanization practices. The conclusions from the thesis cannot recommend policy changes or even concrete design recommendations for upgrading or redevelopment. Instead, the thesis uses a documentation process to identify how key public realm elements are used in a framework of adaptive ‘loose’ space. Urban villages are not necessarily a ‘best model’ and not all urban villages need to be preserved. Singular understandings of ‘good’ urban planning are regressive because cities are dynamic objects that respond to change. Current urban planning practices in China rely on short term implementation of static, flashy master plans, many of which are hastily built and poorly designed for the public realm. The value of urban villages extends beyond affordable housing and mixed-use, pedestrian friendly neighborhoods. The incremental developmental pattern of urban villages shows how one model manages to accommodate diversity and adapt to its rapidly changing surroundings through small plot flexibility.

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FIELD STUDY
URBAN CONTEXT OF URBAN VILLAGE BELT

Shenzhen was selected for study because of its fast-paced developmental history; in less than one generation, the city began as agriculture, transformed into an export-manufacturing base, and finally emerged as a hub of service, technology, and creative industries. For the documentation process, one area of Shenzhen was chosen for closer study. Documentation and analysis of other villages and public realms across Shenzhen were less rigorous and were used as a baseline to better understand whether observations from one area are part of a broader regional pattern. The selected area in Nanshan, a western, predominantly residential district that borders Bao’an and Qianhai Bay to the west. The area borders Shekou Peninsula to the south and Overseas Chinese Town (OCT) to the east (Figure 4-1). Before 1980, the area was a collection of small towns and rural land and was the former administrative center for Xinnan County before being integrated into Shenzhen as the Nanshan District. According to a local urban designer, the existing boundaries of many of the villages marks the rough boundary of the original coastline. After Shenzhen was designated as the first SEZ, the Nanshan area developed a strong industrial presence supported by port infrastructure and proximity to Hong Kong. As the city developed, the western edge was filled for warehouse and industry, many of the towns and villages redeveloped into urban villages to house the flood of new workers, forming a ‘belt’ between the surrounding city. Because Shenzhen’s central city area is shifting towards a technology and creative

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1 Fu Na, Interviewed by author, January 28, 2016.
based economy, manufacturing uses have become discouraged. Shekou and OCT have already transformed into prime real estate for Shenzhen’s upper middle class and expatriate community, filled with walkable lifestyle centers and expensive apartments. Under a new 2020 masterplan designed by Field Operations as an outside consultant, Qianhai will be redeveloped into a new center of finance, modern logistics, and innovation. Portions of the masterplan have been completed in the Qianhai Free Trade Zone, including an ‘Enterprise Dream Park’ modeled after Silicon Valley and an incubator hub for young entrepreneurs. These projects provide funding support and facilities for start ups and established technology companies. Thus, Nanshan will inevitably be redeveloped into new residences to house the flood of new ‘knowledge economy’ workers. While there are no concrete plans to completely redevelop the entire belt, the villages are being transformed section by section. Some of this transformation is initiated by the city but some of it may be self-initiated by the villages themselves, using a village shareholder corporation redevelopment model like Huanggang or Hubei, two other villages in Shenzhen’s central city.

The chosen area in Nanshan is already occupied with construction projects between the village and Qianhai Road for ‘modern, urban living’. Many others are moving through the planning process, and the existing fabric is only a temporary, transitional state. Developing the edge as “an open system” to “enhance exchanges” is part of an ongoing district strategy, written in the Nanshan 2010 Master Plan. Yet much of these new developments between villages and main roads build an impenetrable wall between the new city and the village. Developmental pressure for more market rate housing in the area is further intensified by proposed megaprojects and special economic areas that promote and subsidize ‘glamorous’ global industries. The artificial

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3. “Nan Shan 2010 Masterplan, Capter 15, Article 79” (Shenzhen Urban Planning Bureau (SUPB), n.d.).

**Figure 4-2**
Top: Model of Field Operation’s Qianhai Design (Field Operations).
Middle: A new technology park in Qianhai.
Bottom: Advertisement for new luxury development.
Figure 4-3
A map of Nanshan district where the yellow area is the urban village belt. White are the roads, and black marks the subway lines. Fuscha is the set of studied formal open spaces. 1: Nanyuan & Nanshan Villages; 2: Xinnan Village; 3. Tongxia Village
injection of ‘innovation’ infrastructure is in contrast to previous small scale enterprises and entrepreneurship in the small booths in Huaqiang Bei or in urban villages that grew over time. The practice of ‘injecting’ businesses is not uncommon in China where new cities outside the traditional city are populated with state owned enterprises (SOE), academic institutions, or government offices. Yet a dichotomy forms between organic growth of entrepreneurship versus state control; these projects in a way undermine Shenzhen’s existing competitive advantage as a space with looser government control, allowing smaller design firms and tech start ups to propagate.

The public realm also transforms rapidly and is subject to redevelopment change at any moment. Yet daily usage is fluid and quickly settles into new rhythms around new plazas, old alleys, and construction sites. Physically and aesthetically, redeveloped and urban village public realms are vastly different. Functionally in both, common elements and patterns of usage suggest such a binary view is overly simplistic. The research questions do not only consider the urban village public realm. Instead, the analysis process is applied to both the ‘formal’ and ‘informal’ public realm to establish a common language to compare spaces. Using a common design language of scales and typologies brings a more objective perspective that reduces the danger of idealization or vilification of either public realm typology.

DOCUMENTATION METHODOLOGY

On-site field research gathered time-lapse footage of different examples of public realm to better understand the relationship between activities, the formal element, and the context. Thoroughfares were studied by walking while an attached camera took a photo every two seconds. Public spaces were studied by sitting in one place where an attached camera took a photo every five seconds. For the mapping process, the public realm is defined as outdoor space that is publicly accessible. From observation, the next step was to interpret physical patterns into objective typologies of spatial configuration, expressed in table 2 with accompanying diagrams.

DEFINITIONS OF ‘NAKED SECTION’ BUILT ELEMENTS

The initial mapping exercise was to map these elements as the base. Critical sections were then extracted to highlight specific combinations of spatial element configurations. This initial map creates the ‘naked’ section and plan, the framework that uses can occupy.

Setbacks refer to the space between the vertical building footprint and the public right of way. For street sections with a street level for vehicles, it is the space from the street curb or painted line to the building, including the sidewalk space. For alley sections, the setback is more not as strictly defined, but it is the space between walking space and the wall of the building. Ground floor extensions are separate built structures that protrude from the main, taller building toward the street.

Built overhead extensions trace their architectural heritage to Qi Lou (骑楼) or veranda housing which protected pedestrians from sun and rain. When applied in the urban village, the jogged vertical section functions as a way for upper floors to maximize upper floor interior
Figure 4-4
Example of Time-Lapse Walk-through in Nanyuan.

Figure 4-5
Diagram of axonometric Elements
square footage while leaving the ground floor navigable as a thoroughfare in narrow alleys. These built extensions are permanent.

**Steps and curbs** simply are 3-8 inch differences in levels between two ground levels. Curbs are part of the street and designed to separate different modes of traffic. Steps are primarily part of a building, separating the ground floor from the street level. Other transportation related typologies include bollards, plastic cones, and painted lines, intended to mark a difference between a space for cars and a space for pedestrians.

**Corners** are angles created by an edge’s varied setback. Convex corners are ‘outward’ facing while concave corners are ‘inward’ facing. **Entrances and thresholds** to other alleys, private courtyards, or between the village and the main roads, also create corners at these intersections.

**Open space** is a dedicated, outdoor public area. While this includes formal parks and plazas, the study also included more ambiguously owned pockets in villages that are wider and larger than alleyways. Clear parking lots were excluded but some spaces that had both parking and other uses were discussed.

**Definition of temporary elements and public realm usage**

The second layer maps patterns of unplanned physical adaptations in space. The third layer maps zones of semiprivate space and social space that were observed. The maps show a hypothetical snapshot which captures all the temporary, unplanned adaptations across multiple observational times.

Public space usage comes in three generalized forms: necessary, unplanned adaptations and social or ‘optional’ activities. Gehl defines ‘necessary, optional, and social activities’ as the three reasons why people use the public realm. **Necessary activities** include mobility, such as going into an office building to work. **Optional activities** are relaxing or recreational, such as people watching. Social and optional overlap, but **social activities** refer to group socialization between two or more people, such as conversations or group dancing. These are distinct from ‘heavier’ physical adaptations to space.

**Temporary ground objects** are unplanned physical adaptations that are not fixed in the ground and can be moved with some ease. Temporary ground objects can either be ‘within’ or ‘past’ the street edge. Objects within the street edge are in the space noted as a ‘setback’ or in some denoted semiprivate space. Objects past the street edge are in the suggested alley ‘right of way’ zone. **Overhead temporary objects** are unplanned adaptations that create a canopy and are also not fixed permanently. These objects can either be retracted like an awning or moved like an umbrella. These allow temporary adaptations and users to be protected from sun and rain, so the user does not need to move goods and other adaptations during rainy days.

Unplanned physical adaptations or activities are somewhat of an intersection of ‘necessary’ activities and temporary elements. These include informal economic or domestic functions, such as vending from a cart, fixing a bike, or hanging laundry outside.

The documentation process begins to answer the second research question of understanding how a physical element affects usage in the
public realm depending on context. In combination, the first layer of built elements sets the stage and framework which the elements of the last two layers occupy. Typological moments are reproduced as sections to illustrate the spatial experience. Key moments are supplanted by informal conversations with users and photography of the physical environments of certain activities. Within the last two layers that measure usage, temporary unplanned adaptations affect ‘necessary, optional, and social’ activities and vice versa. Different urban conditions were selected from the study area in Shenzhen’s Nanshan District to explain how the typologies interact in different contexts. Afterwards, an overview of other villages in Shenzhen provides a ‘baseline’ more comprehensive look to examine whether the observations from the studied village public realms were anomalous or patterns across all villages. Finally, an overview of adjacent, formal public realm spaces grounds the observations from village’s public realm in context to examine whether urban village public realm use is part of a broader pattern or is anomalous when compared to the typical Chinese public realm.

DEFINITION OF TEMPORARY ELEMENTS AND PUBLIC REALM USAGE

Oscar Newman created definitions between public, semipublic, semiprivate, and private spaces as a framework to better understand safety and crime prevention in “defensible spaces.” 4 Private spaces are fully “within the private domain of the family.” 5 In the case of a series of detached homes, front yards under direct ownership of the houses are semiprivate because they are accessible to the public street. For an apartment building, the frontage space would be semipublic because it is shared by a select amount of families and its ownership under the apartment as a whole. Public spaces are free to navigate and shared by the neighborhood.

The distinctions of ownership are fluid, what Gehl describes as a transitional ‘soft edge’ zone. The framework of the thesis will define these zones based on a perceived degree of ownership, evident by the temporary adaptations and uses in those spaces. The fundamental

5 Ibid, 15.
CODE LEGEND
- Setback: None - 2'
- Setback: 3' - 4'
- Setback: 5' - 6'
- Setback: Greater than 6'
- Building: Step
- Building: Overhead building
- Building: Non-standard sign
- Building: Ground Level Extension
- Temporary: Ground object within street edge
- Temporary: Ground object past street edge
- Temporary: Overhead installation
- Open space (see Table 1)

MAP KEY

Open space (see Table 1)
On the southern end of the urban village belt, the urban fabric of Nanyuan Village (南园村) and Nanshan Village (南山村) resembles the original village alley network and is a mix of late stage urban village 6-8 story buildings and shorter buildings. The villages’ land use context is mixed-use residential. While not rigidly gridded, the urban village is roughly organized by major north-south connections and east-west service alleys. A main alleyway cuts roughly through the center and has a line of small businesses. Businesses are also concentrated near larger entrances to the urban village from the main roads along the north, east, and west edges. Most of the village is networked with primary alleys (8-12 feet between walls) and narrow service alleys (5-8 feet between walls). Wider street scale alleyways that are accessible to cars also weave into Figure 4-7

Left: Map of coded elements and neighborhood context map key. The left end connects to the right end of the bottom diagram.
Right: Map of coded zones based on activity.
the site at certain entrance points; in Nanyuan a major street-width alleyway runs through the site parallel to Qianhai Road. Sections 1-5 represent a few typical variations on the street-width alleyways, and Section 6 represents a typical pedestrian-width alleyway. The differences between the two alley typologies highlight the impact vehicular access has on patterns of activities in urban villages.

The alleyways converge on open spaces that punctuate the fabric, anchored by village ancestral temples. Some of the temples and open spaces have updated materials, suggesting recent improvements were made. Other pocket parks with stone furniture around the village suggest there was an environmental improvement effort. After the village was developed, these pocket parks received external funding support from the Nanshan District-wide “Eight Model Villages” plan. Other possible funding support from the plan went to alley infrastructure improvement. The pavement is in good condition and there is modern drainage infrastructure. Overhead telecommunication and electricity infrastructure is bundled and

Figure 4-8
Left: Sections and corresponding images. Right: A-C, Examples of how wedges are used. Semiprivate/semipublic space is annotated with orange and yellow lines.
orderly, in contrast to ad-hoc examples of wiring in other villages.

CHARACTERISTICS OF LIFE

In the pedestrian-width alleys of the residential mixed-use village, businesses are open until very late, past 10:30pm. Businesses are store owner’s living rooms, where their children work on homework, families eat dinner until the shop is closed for the night. Neighbors often stop by and chat or set up a table to play mahjong. Most businesses use roller shutters as entrances rather than doors, so there is a strong indoor-outdoor connection between the alleyway and the building interior. Though the primary alleyways and open spaces do not have much overhead light infrastructure, the transparent, active edges remain bright until very late in the evening. In street-width alleys, the street area becomes a shared space between pedestrians and slow moving cars. Most cars use the space to park, and most cars remain parked; there is little evidence of cars frequently moving in and out to make trips. The design of the village accommodates this rhythm of life through the scale and arrangement of its physical typologies.

1. VARIED SETBACKS AND MARKING THE EDGE: RELATIONSHIP TO THE STREET

In the street width sections, the setback is determined by a building’s steps or a yellow painted line. Setbacks are also created when the street turns askew to the orientation of buildings, as is between section 1 and 2 in the village plan. When the street is marked with the painted yellow line or different paving materials, drivers respect the boundary. Smaller bikes and motorcycles are usually parked closer to the building. The line of cars marks the edge, turning the setback space into a semipublic space. Even when there is not a car parked, they still help to mark an edge. Near section 2, a child plays on a ladder on the ground while men socialize around a table where a van is parked at a wedge created by a change in setback. At the intersection near section 2, many businesses and homes set out tables in their sheltered setbacks for residents to either dine or play games (Figure 4-7A). Other similar semipublic pockets are occupied by a variety of domestic, economic, and productive uses (Figure 4-7B, 4-7C). Yet, the
edge created by vehicles also blocks access; at the first pocket park across from the temple at section 3b, the line of parked vehicles blocks easy access to the sparsely occupied open space. Street trees also occupy some portions of setbacks to create semipublic pockets. In spaces where ‘territorial’ markings are unclear as in section 4 and 5, cars are parked more sporadically, occupying semipublic space or blocking the way.

In the narrower pedestrian-scale alleyways, larger setbacks are occasional and due to demolished buildings or a different building line. Instead, the setback is usually the space marked by the step and overhead extension in front of the business. Some private setbacks are completely enclosed by a gate and garden walls. These spaces are usually filled with storage. Larger semipublic wedges are occupied by a variety of adaptations including potted plants, space to display goods, and even a makeshift pool hall (Figure 4-9A). Because pockets with larger setbacks deep in the urban village are not common, businesses and residents usually claim them with semi-permanent physical adaptations. Varied setbacks help
create semipublic space for some buildings without a step or overhead extensions, (Figure 4-9B) where two cafe tables mark additional seating space for the restaurant.

2. OVERHEAD EXTENSIONS AND STEPS

Along the street-width alleys, buildings with generous setbacks rely less on overhead extensions and steps to mark the boundary for semipublic space. When there is no painted line or the painted line is directly on the building’s edge, overhead extensions and steps make a critical difference in the rate of unplanned adaptations. Most stairs up to the ground floor business are limited to 3-4 steps. This creates an effective semiprivate space that allows a variety of adaptations; working around the steps, a table with uneven legs will extend past the stairs, using its longer legs meeting the street to stay flat.

Semi-enclosed outdoor space often eliminates a transition between public and private space. Most enclosed spaces act as permanent barriers, creating private space for a residence’s storage. In another example of a potential semiprivate
Figure 4-10
Images of elements and activities
space becoming too separated from the public space, in section 5, a building is separated by half a story of steps and railings, creating an elevated private space. Those spaces are not actively used and are further shielded by plants and parked vehicles. As an exception in section 3a, a semi-enclosed balcony space in a residential building becomes an impromptu steamed bun shop. The enclosure is minimal and at counter height, maintaining visibility between the porch and alley.

Along the pedestrian scale alleyways, newer and taller buildings tend to have built overhead extensions which create a thin semi-private space. Often, this space is also stepped up from the alleyway. Though the setback is very thin (1-4 feet), the semiprivate space frequently has some kind of physical adaptation. At the most minimal (1 foot), people keep brooms, signs, chairs, and parked bikes in the space. At wider scales, businesses often use the space to extend their floor space to place counter space or to display goods. Counter spaces extending into the semiprivate space allow store owners to directly access customers from the alleyway and greet neighbors who might pass by. Practically, overhead elements and temporary awnings protect store goods and furniture from weather, so users do not need to constantly move their adaptations. This allows adaptations to become semi-permanent and regular, further establishing a claim over a disputable semiprivate space.

The delineation of the soft edge along older buildings without these features is less clear. The space is practically nonexistent and is either left vacant, used as a wall to park a motorbike, or cluttered with storage. Heavy storage is difficult to move and claims private space in the public zone while not promoting an active edge. This suggests when semiprivate space is not marked well, users can still forcibly claim public space with inactive storage.

Sometimes, smaller buildings will replicate the sheltered effect of the built overhead extension either with temporary awnings or permanent roof overhangs (Figure 4-9C, 4-9D). Buildings with existing built overhead extensions will also use temporary overhead awnings to further extend their temporary claim to public space to create more perceived semiprivate space. Motorcycles are usually parked without much of a pattern, since their thin profile can easily sit next to a wall without impeding movement; bikes and motorbikes parked perpendicular to the wall though mark a semiprivate space as in (Figure 4-9E). The benefit of semiprivate space is that furniture and even hanging laundry can be used to screen the interior slightly from the public thoroughfare while also maintaining an active street front.

Beyond economic or domestic functions of the soft edge, the narrow space is also used for socialization in (Figure 4-9F) where someone passing by greets and has a conversation with a neighbor in the business. The narrow space also allows for an impromptu space to chat on either side of the alleyway. At another corner, an umbrella claims additional semipublic space where chairs are arranged underneath (Figure 4-9G). A man on the other side of the alley sits on a bike while a man who is passing by stops to have a quick chat. Seating in the semiprivate space is used for people watching from businesses, evident by the placement of the stools or a woman working outside on her front steps in front of her home for the daylight (Figure 4-9H, 409J).
3. CORNERS AND ALLEY ENTRYWAYS

Along the street-width section of alleyways, many semipublic wedges and convex corners are created by varied setbacks. Concave spaces can create sheltered semiprivate spaces, but these spaces are not used much differently from the space created by overhead built extensions and steps.

The convex wedges at the intersection are used as social space. Right below the junction before section 5, a small wedge is created in front of a business; it is sometimes used as a temporary gathering or social space, in this case for children playing (Figure 4-10A). As discussed before, at the juncture before Section 2, a restaurant sets up tables and some tables are used to play games. Behind the Nanshan temple plaza, an awkward juncture is used as both space to play table games but also a social space to do domestic chores together, in this case sausage making. The corners and wedges of the juncture fronts different buildings and becomes an impromptu public space for neighbors. Social activities might be more attracted to these spaces rather than confined to more private spaces because people enjoy ‘seeing and being seen.’ Corners seem to have an alluring quality for social activity: a man sets up a chair at a corner and a small bench at a small intersection is occupied by people watching pedestrians walk down the alleyway. Another explanation is that intersections are natural, regular meeting places, so sitting somewhere with more traffic flow is an easy way to talk to more neighbors. Corners in Nanshan-Nanyuan are not often occupied by informal vendors; one vendor sets up his bike with hard candies on sticks at a busier corner of a wide pedestrian entrance to the village from the main road. Most other entrances are either very narrow or dominated by parked cars. While many corners are not used, the usage pattern suggests corners are used more as very temporary social or optional uses rather than for commercial and domestic unplanned adaptations that may occupy a space for hours.

4. OPEN SPACES

As the most active open space, the village central plaza in Nanyuan was studied most extensively. Three other less active spaces were observed more intermittently because their use did not vary much. Ancestral temples

Figure 4-11
Images of Nanyuan open space, taken from ‘D’
anchor all these spaces, yet only the Nanyuan temple had activity outside throughout the day. Temples are either neglected and unused, used as community recreational space, or used for its original religious function. The determining factor between an active open space and inactive open space is the presence of an active edge with plenty of stores and residence entrances.

For the study, the 20m x 40m plaza was divided into subsections, A through E. Corner A faces the ancestral temple, section B fronts a few restaurants and a children’s arcade, and corner C fronts a restaurant and large tree. Sections D and E have less active uses on the edge with a corner store and a drinking water shipment business.

The use of the open space coincides with the daily rhythm of the village. Peak use during the weekdays is before lunch and before dinner when homemakers were running errands and in the early evening when people left their homes to stroll and do other evening activities such as dancing. Observed number of users ranged from about 10 to 140. On average, peak day usage in good weather was around 90, and on a
cloudy, cool day was around 65. On a pleasant evening, the plaza became crowded at around 140 people. Passing traffic in and around the plaza ranged between 5 to 30 people.

The edges of the plaza are bordered by minimal four inches curbs where many plaza visitors sit or stand around. Unsurprisingly, during sunny, cool days, good southern exposure concentrated ‘stayers’ on edges A and B. The good weather compounded with the active building uses and active traffic flow in the adjacent pedestrian alleyways concentrated use at A and B. Cloudier days have a more dispersing effect where people sat around edges with more foot traffic. Around the plaza, village men tend to stand around, loiter, and socialize while around B.

The curbs prevent motorized traffic from cutting across, making it a safe space for very young children to play. When running errands during the day, mothers or grandparents would often bring their children along and stop to rest in the plaza with groceries. Other mothers or grandparents brought their pre-elementary aged children to the plaza to the arcade while they sat in plastic chairs provided by the same arcade in subsection B. In this case, the arcade becomes the de facto steward over the plaza; the manager sets out plastic chairs and electric bumper cars, often running outside to tell children how to safely use the toy. Young children would also bring their own scooters or toys, transforming the blank plaza into their own playground space during the day. Lunch time use is lower than late morning use; while western public spaces are used for lunching, Chinese people do not eat in public spaces.

During the evenings, the plaza can become fully occupied. Two separate groups of dancers occupied different corners of the space on either end of the plaza, both playing their own music. Somehow, each group managed to follow their own music without being in conflict with the other. Between the groups of dancers, children of different age groups played out imaginary scenarios with their shared toys while parents socialize on the edge. Both pedestrians and scooter drivers often stopped to watch the action of the plaza before going on their way.

When the plaza is less active during the day, the space is used for domestic or economic unplanned activities. On a sunny day, multiple people sporadically used the space to dry bulky, large comforters. On another occasion, the restaurant at corner C used the ledge on the tree to store dirty dishes or placed a large round table outside to make sausages while an audience watched. Along the less active D and E edges during an afternoon lull, a van once pulled up into a niche behind a building and unloaded goods. Another worker transferred goods to his moped before going into the village and then coming back out to load more goods. A similar event happened near Section 5, where a truck unloaded slaughtered pigs for scooters to transport across the village. Thus during less active times, the blank plaza is transformed temporarily for alternative uses. During peak use times, the plaza is used primarily for recreational and social uses.

Off the map on page 38, Nanshan plaza also has a distinct schedule of use. The plaza is long without a clear sight line throughout the whole site due to a wall placed in front of the temple. The trapezoid space is 15m, 20m by 40m. During the day, the space is used for restaurant preparation and parking. Pedestrian traffic through the rather long space is minimal, on
average, 2 people per minute. During the evening though, the whole plaza is taken over by colorful tents and larger restaurant seating (Figure 4-12B, 4-12C). Because most buildings and stores are small, larger family style dining is difficult to accommodate in small footprints. Outside, there is plenty of flexible space where cars can be moved and tents can house many large tables. Social spaces surprisingly occupied wedge spaces behind the temple (Figure 4-12A) instead of in the plaza.

Finally, there are two open spaces without much activity that contrast the previous two examples. At Section 3b, a pocket park is bisected by the street-width alleyway where cars are parked. Though the pocket park is pleasant, vegetated, and clean, it lacks any seating amenities. The temple is used more than the pocket park, since there are multiple ledges to sit on. Even though the ‘porch’ bun shop from the ‘Overhead Extension’ section is adjacent to the pocket park, it does not really activate the public space (Figure 4-12D). A successful example of a pocket park deeper in the village has many seating amenities and benefits from good light and ventilation.
PUBLIC REALM USAGE IN INFORMAL AND FORMAL SHENZHEN

(Figure 4-12E). Another plaza without any active edges is poorly paved and cluttered with trash and storage (Figure 4-12F). These counter examples suggest basic maintenance, access, minimal seating amenities, and active edges are important factors that affect plaza usage.

SUMMARY

Two typologies of village alleyways show different usage patterns. Street-width alleys tend to have more variation in setback conditions which allow for a variety of unplanned adaptations to flourish in the different scales of semipublic niches. Pedestrian-width alleys and street-width alleys rely on the occasional abandoned plots for larger adaptations. Businesses with minimal setbacks in both typologies establish semiprivate spaces on the narrow frontage space created by a step and built overhead extension. While most unplanned ‘functional’ adaptations concentrate in these claimed semiprivate edges, public spaces and ambiguous semipublic corners allow for more public, social uses. Because foot traffic is minimal in the residential context, informal vendors do not tend to use these ambiguous corners or open spaces, preferring busy, established market areas. Patterns of use in open spaces shows the compatibility between different uses and social groups; users are able to schedule and place themselves around others with minimal issues. During less active times, open spaces are used for less desirable activities such as drying laundry, cleaning dishes, or unloading freight. During peak usage, the area is safe for social and recreational activities.
CHAPTER 4 | FIELD STUDY

XINNAN VILLAGE: RENOVATED ‘OLD BRIDGE’ MARKET ALLEYWAY AND BOTTLENECK

The main north-south alleyway that runs through Xinnan Village (新南村) is the most commercial focused and busiest alleyway of the studied urban villages in Nanshan. Its name comes from an original bridge that remains at the heart of the market alleyway and central market space. The district-wide “Eight Model Villages, Eight Model Streets” program contributed to establishing a cohesive market identity to the alleyway.1 New pavement, street improvements, and uniform signs are the dominant environmental improvements. Only a small section past Section 13a is pedestrian-width. The south, street-width section has distinct separation of a ‘sidewalk’ level and ‘street’ level. Xinnan Village Market Alleyway is a model case study of the interactions between the historic urban village fabric and a formalized street environment intervention. Because the market is divided into two distinct sections by the main market area, we

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Figure 4-14
Xinnan coded plan of central market alleyway
Figure 4-15
Left: Xinnan coded plan of central market alleyway
Right: Xinnan zone coded plan
Figure 4-16
Left: Xinnan coded plan of central market alleyway
Right: Xinnan zone coded plan
can observe two sets of store behaviors on either end. The two market spaces differ the most in their setbacks; the wide south section is jagged while the narrow north section resembles a consistent, standard urban village commercial alleyway. The residual semipublic spaces that emerge from this interaction allow and promote a diverse set of activities and territorial patterns for shops and informal vendors.

CHARACTERISTICS OF LIFE

In a busy market alleyway, no space goes to waste. Varying combination of elements reveal different types of activities and usage patterns of the market scene. Distance from the central market space often determines the type of business. High volume retail concentrates closer to the center while service-based stores are farther away. The market is busy all day, starting in the late morning. Peak traffic is right before dinner when many visitors are buying groceries to cook with.

1. SETBACKS: RELATIONSHIP TO THE STREET

The most prominent feature of the street-width alleyway is the jagged nature of the setback space between the main building to the alleyway, ranging from 1 foot to 10 feet. The aerial photo reveals an angle where the alleyway cuts across the grain of the urban village fabric. While the setback could remain consistent, often times the result is a straight curb while the buildings continue to step as in section 4c (Figure 4-16b). Varied setbacks also come from random patterns of building footprints. Varied overhead construction and street level building additions, as in sections 6 or 7a (Figure 4-17), further break apart the alleyway’s public realm. The highly articulated and heterogeneous setbacks create different semiprivate spaces.

Space with large setbacks that are bordered by sections with short setbacks, are sometimes filled with merchandise, storage, or other materials from the businesses that front onto the space. The ownership of these spaces is unclear. The space is less private than the step-overhead strip but is more private than the wedges in Nanyuan. Because the spaces are not regulated by the police who occasionally walk by, they will be defined as mostly semiprivate.
In busier sections of the market street, closer to the bridge, these spaces are used by completely separate businesses, some licensed and some not. Unlicensed businesses, according to one restaurant owner, come out during the early evening during peak traffic. Other uses of these enclosures are for freight staging areas that blur public and private spaces.

Minimal setbacks, either right at the street or narrower than 3 feet, force businesses to place merchandise past their semiprivate setback and into the street. This type of behavior is more prevalent as the business types change and become closer to the main market, particularly in the narrow market alleyway. Groceries, butchers, fish mongers, dry goods sellers, and general merchandise sellers depend on advertising their wares directly to people walking by. Enclosed businesses such as office services, pharmacies, and a conventional convenience store with similar minimal setbacks generally stay within their boundaries. The first set of merchants serve customers directly in the public realm, adding to the alley’s chaotic, market character.

Setbacks in between 3 feet and 6 feet resemble a pedestrian sidewalk. If the setback is consistent across large stretches, pedestrians will use them as a walkway. The space is not minimal enough to allow a business to easily claim ownership of the turf but not large enough to do anything particularly useful. These spaces are used but the activities are more temporal. The occasional parked scooter, box, or chair might occupy the space. But if this setback is interrupted by smaller setbacks, the semiprivate space will more likely be used.

2. CURBS: RELATIONSHIP BETWEEN STREET AND ‘SIDEWALK’

Throughout the alleyway, the street level stays consistently at 20 feet, enough for a parked car and a passing car. Along its sides are curbed sidewalks, rising at a standard level of about 3 inches. The sidewalks by design were meant as a way to separate traffic. In spaces where there are no curbs, to the north of the site, a yellow painted line marks the boundary between public right of way and the pedestrian space or store space. In practice, because the width of the sidewalk is largely inconsistent throughout the market, they are not used as pedestrian thoroughfares. Often the width of the setback between the curb and building becomes one to two feet. Parked, personal cars become rare as the alleyway approaches the main market space, so the roadways are used by pedestrians. Occasionally, vehicles with goods share the road with pedestrians. Because of the unintentional pedestrian and car shared space on the street, the ‘sidewalk’ space between the building and curb can be used by businesses as a storefront’s extension.

3. OVERHEAD INSTALLATIONS AND STEPS: BUILDING QUALITIES

In the Xinnan market alley, overhead construction exists in two flavors, one a true arcade and another a truncated version. These elements also identify two different types of buildings, suggesting their construction happened at different phases of development. Furthermore, the true arcades align with the street while buildings with a truncated upper section align with the urban village fabric. Examples of true arcade buildings are sections 3a, 4a. The upper stories overhang by 5-6 feet over a curbed sidewalk (Figure 4-16c).
PUBLIC REALM USAGE IN INFORMAL AND FORMAL SHENZHEN
Figure 4-18
Sections 05a to 09 with corresponding images.
Figure 4-19
Sections 10-13 with corresponding images.
The truncated version applies to most of the taller urban village buildings. The space under the truncated overhang is semiprivate space and is occupied by the many objects sitting on the steps. Usage pattern does not stop at the end of the step though. Boxes often balance on the step, pushing a little bit into the public realm (Figure 4-16a). Butcher’s elongated table rest on small concrete blocks, halfway in the building and halfway onto the sidewalk or street.

The usage of the 3-6 foot wide arcade space is not as consistent. Because the arcade space extends the length of a small city block, it is often used as an actual pedestrian space, instead of semiprivate space. But because arcade-type spaces are farther from the main market, the types of businesses vary as well. These businesses might have less reason to intrude into the public realm.

Occasionally, these protruding overhead spaces are supplanted by temporary overhead objects, either umbrellas or awnings that extend from the store signs. Permanent, unconventional, large signs, such as the department store in section 6, also extend a business’s more intimately scaled frontage space (Figure 4-17). The overhangs typically are placed right above the door. When the ground level extends past ten feet, as in section 4a, 4b, and 4c, awnings might be placed at 9 feet. The installation of temporary, closer to the ground shelter creates an intimately scaled semiprivate space. Temporary overhead objects also extend semiprivate space past the setback or shelter a larger setback. The very wide butcher’s table was shaded by awnings and extended out from the building footprint, as is in section 9. Small counter service eateries placed their movable metal counters right at the edge to serve customers directly on the street while the prep zone is within the building. Both permanent and temporary overhead installations are critical tools to extending perceptions of a private storefront’s stewardship over semiprivate-semipublic space in the public realm. These tools allow certain businesses to reach their customers right on the street rather than

**Figure 4-20**
Examples of vendors operating outside a store. ‘A’ sits in a semiprivate space. B extends an additional layer of produce to sell on the street, claiming temporary space. C claims a corner.
### Table 4-1 - Summary of sections and physical elements, activity in each space.

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*Setback in feet.
conducting business inside the tight quarters in the urban village’s buildings.

4. GROUND FLOOR BUILDING EXTENSIONS

Large stores like supermarkets and department stores further from the central market space require more space than smaller, more specialized stores. Often these larger businesses are at the corner entrances of urban villages and in newer constructions. For Xinnan, the main entrance to the alleyway to the south is still occupied by smaller, older buildings, a residential fence, and construction walls for the new road. The north entrance is occupied by the narrow end of the main market, so a large supermarket would be redundant on this end. Further away from the main market, a few large stores extend past the existing building footprint and into the setback zone with a makeshift plaster construction. These additions further muddle private and public realm space, since they fully extend to the curb. These mostly permanent additions are either built (a) without permission, (b) built with special permission by some authority, (c) owned outright by the business, or (d) preexisting to the curb. Whatever the process, they contribute to the jagged nature of the setbacks and disrupt the sidewalk as a pedestrian thoroughfare. This allows neighboring businesses to claim public realm space as well but with more temporary store installations in semipublic space.

5. CORNERS AND ALLEY ENTRYWAYS

Jagged street edge create sheltered concave corners. An extreme example of multiple corners aggregating is Section 4c. Many other sections show a space created between the cut line in the front and a building protruding in the back; in plan, this would either be part of a nook, as in Section 7b, or part of a natural jagged edge created by the angle between the alleyway and the grid of the urban village, as in Sections 10a through 10c. Perpendicular entrances to the market alleyway also break the street edge and creates convex corners with more exposure, as in Section 11.

The concave corner compounds the private sheltering effects of the other elements, transforming semipublic space to semiprivate. At one point in Section 4c, a business creates a window at the end of an arcade to help service the stall that sits against it. The concave corner is the most likely spot for a business to extend outwards. The corner can also be used for more permanent storage rather than a temporary selling space.

Perpendicular entrances into the market alleyway are either gated or open. Most gated
entrances deliberately start at the street edge instead of being flush with their neighboring buildings. The setback building either has a first story extension or a built fence, as in Sections 10a. These built out spaces create a concave corner condition as well as the convex corner at the entrance. In cases closer to the market, the corners are adapted by temporary vendors who have mobile merchandise. Particularly at Section 11, edges next to gate openings that do not have a store front are occupied by layers of vendors. These corners provide shelter to the backside but offers an advantageous spot to reach customers (Figure 4-18b, 4-18c).

6. OPEN SPACES

There are four open spaces that punctuate the alleyway: the southern entranceway, the pocket park, the main intersection, and the marketplace next to the old bridge. Along the alleyway, spontaneous social interactions were not common beyond shopkeeper and customer interactions. This differs from other urban villages where a group of people might sit or stand in front of a store as a frequented hang out spot. The difference is probably a result

Figure 4-21
Images of open space, labeled A-D. Within D, there are different conditions produced by the bridge.
of the market being too busy to slow down to have a chat. These four open public spaces illustrate the need for dedicated open space to create social space absent in the market alley.

Spaces with plants or built-in seating attract older groups. Large planted trees adorned with ritual objects correspond with neighboring temples. The entrance plaza space acts more like an intersection of two alleyways with parking, but certain spots allow for social activities. One restaurant during evenings placed tables at the corner, marked A, and along the edge of the temple, marked B. On some occasions the restaurant would lay orange cones along the temple edge to prevent cars from parking. A potted plant during the day marked the corner to prevent cars from turning too close into the restaurant. Despite being quite exposed, the temple’s circular tree seating provides enough safe space for people to sit and watch others walk by. Also, car turnover is minimal, so the space is pleasant for restaurant goers and sitters. On the left edge, two, small food counter service stores occupy diagonal nooks, allowing patrons to eat and chat away from the flow of traffic.

The pocket park is sheltered from the alleyway, so there is much less opportunity to people watch. Children and parents with toddlers sometimes played in the pocket park, but its usage was sparse and sporadic compared to other studied open spaces. Vehicles park along the park’s edge, and cones suggest some kind of ownership or claim over a space, though the mechanism is unclear. In the afternoons, a group will sit in the entrance to the pocket park, blocked by police vehicles. Their solution was to sit in the police van and chat while also being able to engage in conversation with neighbors who might pass by.

The third public space is the major intersection of a primary east-west connection. A garbage collection facility is occasionally serviced by the shared road-pedestrian space in the middle. Bollards in the third public space also act as impromptu seating. A typical urban village ancestral temple sits behind the trash shed, and its ancestral, large tree has seating on its perimeter with a small incense burner at its base. Though less pleasant than the first two spaces, it was frequented by older men from the village whose presence fluctuated with the

![Image A](image1.png)

![Image B](image2.png)

![Image C](image3.png)

**Figure 4-22**
Images B, C are of the same location, one in the morning, the other early evening. Spatial negotiation and congestion are issues of management of semi-private and public space.
large garbage truck, parked cars, and logistics vehicles that maneuver through the space. On other occasions, vendors might set up shop temporarily, such as a woman selling clothes from a portable clothes rack.

The central market space is between the larger stretch of street-styled alleyway to the south and the narrow market alley to the north. The open space is occupied by the temple entrance, the original bridge, and the market intersection. The bridge is a continuation of the alleyways and acts as the main thoroughfare. The temple entrance is separated from the raised bridge, and has seating for socializing and stopping. Along its raised banisters, vendors from the directly adjacent market or unlicensed vendors place their goods along it to sell. The use of the bridge is a surprising adaptation and illustrates that articulation through street furniture can yield interesting results in the right context. The open intersection then extends out into two supporting service alleys, both large enough for vehicles to pass. At the main junction, many temporary vendors bring carts of goods. Others sell directly from vehicles in the open. Many of these part-time vendors actually participate in cross-border trade, buying ‘safer’ goods in bulk in Hong Kong before selling it in Shenzhen. The arrangement of the vendors creates an implied edge for the right of way (Figure 4-20d).

Unlike the alleyways, the edges of these open spaces are not fronted by businesses who have implied or legal claim over their store front space. Other sections of these open spaces are sheltered from the flow of traffic, providing comfortable space to socialize or bring children. The market intersection is a dynamic and flexible space example, where instead of heavy furniture, goods are sold from easily packable carts and trucks, possibly under a storable umbrella. Multiple crate, styrofoam pallets, tents, and furniture in contrast, are deployed by businesses that only have to move their goods back so far.

The mobility of these businesses is important when confronted by enforcement agents or a vehicle that needs to pass through. The dynamism of the space allows uses that might need to be separated to coexist. While sanitation services are critical to the function of the village, when it is not in use, it is a social space for the ancestral temple and village.

SUMMARY

The market alleyway gains its identity from the soft edge adaptations that allow diverse merchants and vendors to conduct business, a neighborhood-scale linear supermarket. Whether intentionally or accidentally designed, the jagged setbacks creates numerous opportunities for businesses to use their store front space creatively, whether to better access customers from the street, provide restaurant seating, or allow informal vendors to sell their goods. A business has a variety of options from the varied setbacks to locate themselves. They might consider what building characteristics they would prefer, or how they would adapt the building and frontage space to suit their need.

Quite likely, the physical form helps diverse businesses with different needs to thrive. A uniform street edge might function well, yet a uniform edge would provide less opportunity.

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for the creative interventions that allow a business to quickly transform their space at a low cost. Similarly, informal vendors rely on awkward spaces such as convex corners or open spaces to enter the market. These part-time vendors appear intermittently to sell goods to possibly pad their other income sources. For villagers, extra retail income supplements rental income while also providing a way to past time; in a separate village, Baishizhou, one villager says he makes rental income but still enjoys selling his crafts on the street. In the village’s limited spaces, open spaces display a flexibility that allows different uses to occupy the same space at different times of the day and week. Most likely, the physical arrangement and diverse nature of the urban village market is a part of its success, a popular and lively space described by some netizens on a Shenzhen forum.4

Yet often the spaces can become too congested when merchants ignore the right of way and extend past the curb (Figure 4-21). The looseness of boundaries becomes the market’s crutch when customers cannot stand still to shop or move around. Non-separate spaces for vehicles and pedestrians creates conflicts, evidenced by the constant loud honking that pervades the alleyway near the congested main market.

TONGXIA VILLAGE: INTERSECTION OF NEW AND OLD FABRICS: CONSTANT RENEWAL

The Tongxia Village (通下村) section of the urban village belt includes a main, updated pedestrian mall that then terminates at a junction of pedestrian-scale alley ways. The pedestrian mall acts as a break between the ‘new’ gridded, 7-8 story urban village from the ‘old’ more irregular fabric. From the intersection, the east-west alleyway is busiest with commercial activity while buildings along the pedestrian mall form a continuous edge with minimal variation. Continuing north goes through a less busy commercial alleyway with portions of the buildings already demolished or covered in scaffolding to be demolished. The pedestrian mall has different paving, seating amenities, and street trees from the other alleyways and is also possibly a result of reinvestment in environmental improvements, funded by the 2013 “Eight Model Villages, Eight Model Streets” though the spacious alleyway itself, from satellite imagery in 2008, has been in existence before the program.

CHARACTERISTICS OF LIFE

The streetlife characteristics of the pedestrian-scale market alley is similar to Xinnan. The wide pedestrian mall is similar to Nanyuan with its wide open spaces for recreational and social uses.

In a booklet of a 2010 Shenzhen Planning publication for the Nan Shan District, an urban renewal plan for a new mixed-use redevelopment has been approved with compensation packages already set up for displaced villagers. Because of the delay in the clearing process, the village is a case study in the usage of public realm space during its redevelopment process. Behind the active market space, many of the buildings have already been demolished. The

Figure 4-23
Coded plan of Tongxia Alleyway on bottom and Ped. mall on top
uncertain transitional state allows unplanned users to enter the space at a low cost.

**SEMIPRIVATE SPACE: SETBACKS, STEPS, AND OVERHEAD EXTENSIONS**

The wide pedestrian mall has two regular edges whose semiprivate spaces are delineated by the presence of physical steps, a change in material, or the built over extension. The pedestrian mall is subdivided into distinct sections by octagonal bench-tree planters and parking spaces. Along the intimate 7 foot pedestrian way along the western edge, setbacks are consistently 7 feet total, where 5 feet of platform space then steps down to the ground as in Section 1. The western edge is divided by railings between buildings and a language of ‘veranda’ architecture through the colonnade and trussing. Businesses use these spaces for advertising space, space to sell goods, counter space, space for customers to wait for an order, and cafe seating. Benches are occupied by a diverse set of people, and some of the stores’ activities use the benches. One restaurant has put out a table for extra seating where regulars chat for prolonged periods of time and play cards. The supermarket at the entrance corner
sets crates of produce on the benches. The combination of the trees, benches, and veranda-style semiprivate space creates a vibrant street life on the western edge, the side most pedestrians choose to walk on.

On the eastern edge, the setback space is mostly 3 feet, marked by the overhead extension. Near the corner of the entrance to the pedestrian mall, a supermarket uses steps that extend their setback beyond 3 feet to about 5-7 feet. While the western edge is about 3/4 occupied with adaptations in its semiprivate space, the eastern edge feels exposed and is only 1/4 used and even sparser when the setback is at 3 feet. One restaurant with more room manages to put out cafe tables and blue plastic stools; a department store further down is comparatively timid with its placement of its goods, considering how merchants in Xinnan negotiate the boundary between their semiprivate space and public right of way despite a physical curb marking the boundary. Most noticeably, the space lacks any temporary overhead awnings; the building’s structure or neighborhood regulation might prohibit these additions. The amount of room to walk is at least 20 feet

Figure 4-24
Left: Zone plan of Tongxia Alleyway and Ped. mall
Right: Sections of alleyways at 1 and 2.
and is certainly ample for a moving car and pedestrian to occupy the space comfortably. Because the business lacks any steps, curbs, ability to add awnings, or painted lines, the existing overhead extension is likely the business’s best approximation for the semiprivate boundary. The pedestrian mall is capped by a crescent shaped plaza and a temple, where walking space narrows considerably to 10 feet. The change in setback allows a propane tank business to set up a makeshift loading dock for its delivery bike. During the evenings, the corner restaurant opens and sets up a barbecue station in the sunken temple area, as in Section 2, and places seating at the corner between the temple, restaurant and an entrance to a perpendicular alley. While the pedestrian mall rarely has car traffic, mopeds and motorcycles do speed down, which may explain the inactive semiprivate space. The amount of vacancies and blank edges (a closed kindergarten) may also contribute to the lack of activity in the businesses still left, since activating a whole street edge has a positive feedback mechanism where activity attracts more activity. The lack of activity on the very thin strip of semiprivate space relative to the large scale of the 2 lane street-width pedestrian mall, even when there is not a lot of unpleasant traffic, suggests provided semiprivate spaces and setbacks need to be in scale with the adjacent thoroughfare, lest they become overexposed and underutilized. Because the western edge is subdivided from the open area of the pedestrian mall, its generous semiprivate spaces are sheltered and more frequently used.

In the pedestrian-width alley, varied setbacks that created semipublic wedge spaces were used very similarly to the alleys in Nan Yuan. Steps and overhead extensions, either built or temporary, allowed businesses to create semiprivate extensions to display goods or put seating. Overhead extensions often push far into the walking space of the alleyway (Figure 4-24a). But because the alleyway is closer to the district’s commercial, civic, and cultural center, the alleyway is much busier with commercial uses than social uses. The largest difference is the presence of many informal

Figure 4-25
Left: Sections 3-4c
Right: A, C Illustrative images of created temporary semiprivate space. B Temporary vendor occupying a corner.
vendors in varied setbacks in front of closed businesses. Many were present during the day, but the alley was fully active by the evening when snack stands move in.

**CORNERS AND ABANDONED EDGES**

Reinforcing previous findings, convex corners created by varied setbacks encourage unplanned adaptations of space. The western edge of the pedestrian mall created more niches and corners using railing. The temple on the eastern edge created corner conditions that allowed a restaurant to set up an interesting layout that spanned across an alley entrance and into the sunken temple space.

Due to the demolition process, many buildings along the alleyway are actually empty. Because many semiprivate spaces have lost their steward, new informal vendors temporarily occupy the space. Some are attracted to the sheltered convex corners created by varied setbacks, including a woman selling eggs from a basket (Figure 4-24b). An entire produce stand occupies the semiprivate space created by a step and built overhead space; the business even installed a large awning to expand its floor space into the alleyway (Figure 4-24c). Smaller vendors seem to position themselves on convex corners which have the most visual exposure when moving through the alleyway. An egg seller positions themselves at the corner of an established business. A produce seller uses the stepped corner of a closed business to set up a line of produce. These abandoned edges have allowed new businesses (or the original business that was displaced) to set up at low start up costs. The flexible structure of these businesses also allow them to open when they make their peak earnings instead of paying for space for times with less revenue; most snack carts and trinket sellers come out later in the evening when all age groups tend to stroll around outside. A snack cart even appropriates a wall and places cafe seating along it. Dead edges from empty shells during the day are suddenly transformed into a vibrant alley of flashing lights and smells. Because most of the abandoned are filled with lighting, temporary furniture, and overhead installations, a

*Figure 4-26*  
Examples of abandoned edges and corners filled with adaptive use along a narrow, busy alleyway
visitor barely notices that the village is actually slowly being vacated.

OPEN SPACE AND AMENITIES

The observations from the two different typologies paints two almost contradictory analyses of how best to design open space.

In the well-maintained pedestrian mall, its success lies largely in its use of trees and benches to subdivide space. The result is a lively, western edge and a less active, overexposed eastern edge. Amenities used in diverse ways and are adapted for new purposes. The benches become extra seating for a village with an addition of a table; the bench space becomes a desk for children who sit on the ground to do their homework (Figure 4-26a). Street trees are used as poles to tie drying laundry and a hammock for lounging. The crescent shaped plaza uses simple metal barriers to block vehicles from entering but also provides temporary seating for the many mothers who visit. The

Figure 4-27
Images of two different open spaces. One is filled with optional, recreational, and social uses due to its many amenities. The other is vacant but overtaken by informal vendors on some days by the evening.
plaza is on average occupied by 30 people during the late morning and stays around 15 through the day until the evening. Sometimes, visitors will borrow chairs from the corner snack shop and align them along the railing to have conversations more easily (Figure 4-26b). Visitors tend to prefer the metal railing because the open space is pleasantly sunny and warm in contrast to the seating under the trees. Many of these mothers have babies while others let their older children run about in the open space of the plaza. A few visitors sit along the crescent in the shade to watch the action of the street and plaza. The sunken temple space is also an exciting space to play for children. Some children play tag while others bring their own toys to play on the ramps (4-26c). The plaza acts as a landmark and a meeting place for some neighborhood kids who run back home to find their roller skates. Because these public realm improvements are located within the village and close to an active edge of semi-private uses, many users probably feel more at ease to adapt and create new opportunities from amenities. Rather than constraining, the addition of amenities and physical articulation allows for an even more diverse range of recreational and optional activities. Without these elements, users would either not be able to adapt the space (hang a hammock) or would be less inclined to adapt the space.

In contrast, a plaza around the corner, whose surfacing is uneven and dirty, is empty for most of the day. It has poor orientation and receives no sunlight (Figure 4-26d). The space has no amenities and is generally vacant during the day. But a few hours later, the boundary between the plaza’s discolored pavement and the alleyway slowly becomes occupied with vendors (Figure 4-26e). Some vendors use minimal adaptation, using a blanket, crate, or basket. Others bring mobile metal carts that bring along gas and electricity to power their snack stand. Some bring entire tents and tables, creating a makeshift market. By 6:30pm, the space is completely transformed, and the plaza is incredibly lively as informal vendors set up and restaurants set out tables, similar to Nanshan (Figure 4-26f).

During the evenings, the pedestrian mall and crescent plaza actually becomes dark and less active. A group of dancing women do adapt the crescent plaza later at night, and some people socialize near the trees, but the informal vendors tend to concentrate around that ‘empty’ commercial plaza.

The contrasting public realms highlights the importance of diversity in typologies of space where both spaces contribute to the overall village life. Social uses cannot flourish in such an unpleasant space during the day, and instead, informal vendors can occupy the space and liven it up. The pedestrian mall stays relatively clean and relaxing without vendors cluttering space with trash.
FORMAL SPACES: FORMAL STREETS, COMMERCIAL OPEN SPACES, PUBLIC OPEN SPACES

Documenting activity in formal spaces around the urban villages gives further basis to the significance of the physical elements’ effects on public realm activity. Though the context is different, the typologies used to describe alleyways can also be used to study formal streets. ‘Formal’ refers to the streetscape that was planned or built by private developers, most likely following city code and went through an approval process. The documentation process will quickly highlight what unplanned activities occur and how semiprivate space is established for each public realm example. The goal in comparing these two contexts is to establish whether urban villages as a phenomenon produce a unique set of unplanned adaptations.

FORMAL STREET SECTION

Qianhai Road is a wide 6 lane arterial road, and its blocks span the entire lengths of the studied villages. The superblock runs 400 meters adjacent to Daxin and 550 meters adjacent to Xinnan. At the Xinnan superblock’s midpoint, a pedestrian bridge spans the road. Half of the road’s edges are occupied by towers on top of shorter block-sized buildings at the street edge. These ground level sections of the building are filled with stores. Other edges are occupied by large towers that did not have a ground level building that meets the street edge. The setbacks for these buildings are greater than 20 feet, and the street section is subdivided very distinctly into different combinations of: a building’s frontage space, pedestrian space, a cycling lane, and a buffer. The building frontage space is either parking or an arcade of shops. Farther away from the subway stop, setback space in these wide street sections are less used, probably a consequence of the lack of active edges. The wide street section disperses pedestrians, and the sidewalk feels empty. Even with semipublic space for buildings, frontage space is instead filled with parking, further blocking an indoor-outdoor streetscape relationship.

Figure 4-28
Examples of formal street sections. A is filled with human-scaled amenities and smaller businesses. B is blank and void of activity. C is used by a line of car repair shops.
Closer to the subway stop, the street section is more active. The reordering of space concentrates pedestrians closer to the building’s edge. In the arcade space, pedestrians walk under a sheltered walkway lined with businesses in a shopping mall, while parking fills the space between the arcade and street.

Another streetscape has no cars and instead consists of small street level businesses, street trees, a ‘bike’ lane, and a planted buffer to the road (Figure 4-27a). The entrances are sheltered and stepped up. The street trees interrupt pedestrian flow and extend the stores’ semipublic ‘canopy’ which is occupied by restaurant space and produce crates. Despite being adjacent to fast moving traffic, sufficient planted buffers mitigate the effect and help to create an edge with active street life. This example of a designed sidewalk space along an active edge of narrow stores resembles the active soft edge pedestrian alleyway. Porosity, referring to the density of entrances, articulation, and transparency of the edge are critical factors to promote adequate layers of semiprivate space and an active street life. In contrast, along homogenous edges with no semiprivate space and where cars block access to buildings, street life disappears.

Public realm space at the entrances or edges of urban villages have a high rate of unplanned adaptations. Many workshops line the outside of Xinnan and Nanyuan villages. These businesses use the construction fence to store flat construction materials and to hang laundry (Figure 4-28a). Smaller buildings follow the original urban village grid and create semipublic wedge spaces also used for outdoor business space and socializing along the edges of busy roads (4-28b). At the corner entrances to villages, high pedestrian flow encourages informal vendors to concentrate. Many men on motorcycles wait in the entrance space to pick up rides. Other vendors are very mobile, including a fortune teller and vendors on bikes. At the edge of Baishizhou, the activity around the subway stop and entrance to the village creates a busy streetscape. Despite many open spaces lacking semiprivate space on its edges,

*Figure 4-29* Examples of activity at the thresholds between urban villages and the formal, urban fabric. B is an example of an ‘edge’ plaza on the street and does not see much active use despite being adjacent to the village. C is a wedge, residual space.
spherical bollards allow different groups of people occupy the space for social use. This is in contrast to an edge plaza in Nanshan; because the plaza is not along a logical flow of people, it is underused. These ambiguous spaces are used as flexible adaptation space for vendors and socialization, similar to the many convex corners observed at intersections in the alleys.

FORMAL OPEN SPACE

The two studied open spaces were a department store’s public space and a cultural-civic public space. The department store’s open space is subdivided into multiple spaces. At the entrance to the department store, an elongated plaza sits directly adjacent to an edge of open air restaurant and cafe seating. Adjacent to the shopping plaza is a plaza with many planted trees, an urban oasis. Moving through the main walkway, the space meets a water feature and a shaded concrete structure. The shopping plaza, urban oasis, and main walkway are well used while the concrete structure is more sporadically used.

Figure 4-30
Studied formal open space plan. The commercial plaza is A. The cultural sports plaza is C and the tree plaza is B.
COMMERCIAL OPEN SPACE

The shopping plaza has more users than the other edges of the department store that face streets. These large setbacks are usually empty besides an evening rush of motorcyclists waiting to pick up potential passengers (2 images). Each edge has a separate entrance to the department store. The most significant difference between these two groups of edges is the presence of traffic, foliage, and active indoor-outdoor edges. The commercial plaza also has benches and comfortable ledges to sit on. Because the street edges are over exposed and have limited semiprivate space for businesses besides the McDonald’s awning, it remains devoid of all types of uses. Throughout the neighborhood, empty commercial corners are a result of blank edges and over exposure, since visitors do not find the place pleasant to stay in (Figure 4-30). Diagonal from the KFC and at another McDonald’s, the setback is slightly narrower and part of the pedestrian flow, so the street edge is active with many activities including evening dancing and conversations. Amenities and other details are important to attract use as well. Finally, the department store’s plaza also has a licensed toy vendor who acts as the ‘steward’ for the plaza in addition to the department store’s security guards. He sits on a corner of the entrance to the plaza to the walkway that connects the rest of the park (Figure 4-29a). The toys he sells activate the plaza as parents buy toys for kids to play with in the plaza. Different kids share toys and are safe to play while parents take a break on benches and ledges to socialize. The presence of a steward who provides additional amenities to a public space is very similar to Nan Yuan. The toy vendor improves the space and also monitors the children, mostly to make sure the toys are paid for. He also plays loud music which livened the plaza and drowned out traffic noises. When another vendor tried to start selling in the same plaza, he enforced his claim to the space. In contrast, the concrete shelter has no active edges and no comfortable amenities. The pond does have fish and children and parents often kneel over to watch. In

Figure 4-31
Examples of different commercial open spaces between the street and building. Providing shelter and articulation are critical to promoting streetlife.
one case, an old man fished in the pond with his grandchildren.

Directly from the entrance to the department store and plaza, a central walkway moves into two quiet tree lined plaza spaces on other sides. The spaces have seating areas and then more secluded paths through denser planting before going to the street. In the secluded area, some people walk through while different people find it a sheltered spot to nap. A group of delivery people from a mobile app delivery service also use the space to wait before getting orders at the nearby restaurants and cafes. The seated plaza space is active with women and very young children who use the seating space to relax and socialize. During peak usage, the space was occupied by about 15 people. Because the ledge is mostly continuous but in different sections, groups can occupy the longer spaces while individuals on cell phones or couples shift to the side for more privacy. Socializing goes beyond acquaintances and friends; in one occasion mothers who were previously strangers talked about their kids in a short conversation. People also bring snacks to eat and stay in the space for prolonged periods.

Figure 4-32
Images from the series of varying commercial open spaces, from open and social, to an urban oasis.
of time, more than half an hour. In the mornings and throughout the day, the space is used for exercise such as tai chi or strolling. Oddly, the other side is structured similarly but is less active. The space is slightly more exposed and a homeless man sleeps there, but the space is usually used by more men than women. The walkway’s ledges are also a popular space for younger people to sit. Some young people set up tables to advertise businesses or hand out promotions; an informal vendor sets up a table at the corner before the concrete plaza. During the evenings, groups of middle age dancers occupy the concrete structure and corner. The urban oasis pockets are poorly lit and empty. The commercial plaza has too much pedestrian flow for a group of dancers to set up and play music.

**CIVIC OPEN SPACE**

Across the street from the department store’s series of public space, there are a series of cultural and civic buildings, including a library, future museum, and sports-auditorium center. There are two primary spaces. Adjacent to the library, a level plaza is filled with planted trees and amphitheater arranged wooden seating. Across a two lane street, a large open plaza with an oval green space is adjacent to the auditorium, fitness center, and auditorium.

The tree plaza is well used for relaxation and social uses throughout the day and evening particularly in good weather. On average, 55 people use the space during peak hours. On sunny days, people organize themselves in the daylight while during overcast days, people arrange themselves along major flows of pedestrian that use the plaza as a shortcut. While the seating is continuous, but the different layers allow people to self organize themselves in their own spaces. The seating also wraps back around in an auditorium configuration to shelter the tree plaza (Figure 4-32). Continuous steps also allow children to play and run along the wide seating space without disturbing other sitters. This plaza space is used for play during the day, and used by a very large group of dancers during the night. These ‘meditative’, low impact dancers take up a majority of the space, and the trees allow ‘edge dancers’ to join in at their own pace without fully joining. Behind other trees a group of younger dancers put on their own music and practice more modern break dancing. A wedge space created by the plaza’s entrance allows a man to set up a roller skating class with cones. He also brings plastic chairs to allow parents to wait, socialize, and watch their children.

The large sports-cultural plaza is bordered by a narrow, low-medium traffic street to the south, a major road to the east, and by the complex’s buildings to is west and north (Figure 4-29). The plaza is continuous under a large canopy that connects the building to connect to all edges of the large (150m - 275m), oblong shaped block. Thus, access is decent, and crossing is manageable (3-4 lanes), except across the eastern road, Nan Shan Big Road, which has 8 lanes. The plaza is mostly one large, flat surface. The space has no benches, but it does have a series of steps between the main plaza and the sub-level swimming pool, where vegetation blocks visibility between the two areas. The canopy shades a large portion of the plaza’s western and northern edges. An oval shaped lawn on the south east corner is roped off and seldom used, probably to allow for the grass to ‘heal’ for later recreational use.
in the spring/summer. Vegetation and trees are used to block visibility between the main plaza from service areas and other emergency egresses. There is a cafe tucked away in the north-south passage that cuts through the site.

Though the space is very large, groups self organize themselves along the edges during the day (Figure 4-32). Pedestrian and bicycle flow on the edges and on a ‘shortcut’ diagonal that subdivides the plaza into wedges that are then adapted by different groups including picnicking, dancing, aerobics, and a dog walking group who let their dogs socialize and run off leash. Relaxing users layer out from the small steps next to the pool. Physical adaptations are nonintrusive, including picnic blankets and plastic benches. In the large open spaces allow roller skaters, skateboarders, and scooters to freely move around at fast speeds. Use is not as regulated as the austere space, signs, and various security kiosks might suggest. A sign prohibits dogs from using the space, yet the plaza is a popular meeting place for neighboring dog owners. Finally, during large events, people congregate in groups along paths of pedestrian flow. People

**Figure 4-33**
Images from the main civic plaza and the tree plaza across the street.
also congregate on the edges and near anchor objects such as a fire hydrant or street tree.

SUMMARY

Even within ‘formalized’ open spaces, small everyday acts reinterpret pre-programmed meanings attached to ‘static’ elements. The simple act of running and jumping between benches or climbing on trees is an example of how a child’s eye for play transforms a plain urban landscape into a playground. Space is taken over with ease and also collectively shared with minimal issues; the rate of shared bench use in the commercial plaza was quite high, since benches were always fully occupied before ledges were used as seating. The success of these spaces in Nanshan’s mixed use, neighborhood center are counter to Pu’s reading of the many underused contemporary Chinese public spaces in ‘civic’ or overly privatized ‘commercial’ centers. The observed pattern of use all depend heavily on local residents for daytime and evening use who pass the space during errands or evening promenading. Gargantuan open spaces near Shenzhen’s Central Civic Center or blank privatized office plazas were often the emptiest space examples (Figure x). All the observed spaces were also sheltered and relatively easily accessible; most of the adjacent roads were only 4 lanes. Blank, privatized office spaces that are inaccessible by other users eventually become filled with cars or left barren with zero amenities.

Through a documentation overview process of many neighboring open spaces, usage patterns are parallel and similar. The only difference is the degree of physical adaptation users are willing to make; users of an urban village open space live or work directly on the edge of the plaza and easily can carry a heavy table, electronic bumper cars, or elaborate sound system to express daily life in the public realm. While the location of urban village public spaces are conveniently located, many of them were observed to be disowned, cluttered with rubble and storage. One mother walked quite a distance to sit at Tongxia’s crescent shaped plaza with her son while running errands and says pleasant spaces such as this are worth the distance to frequently visit. The interview reveals that while there is a lot of high quality open space in the general neighborhood, much of it is too inconvenient, unpleasant, or inaccessible to urban village residents. A mix of high quality open spaces with amenities to protect against disuse can be balanced with more flexible spaces and semiprivate wedges that can accommodate uses that negatively impact recreational and relaxation uses.
CHAPTER 4 | FIELD STUDY

OTHER VILLAGE SPACES: DAXIN, HUBEI, BAI SHI ZHOU, JINGYING VILLAGES

Many villages were studied but not as closely as the mapped and drawn public realms which are a result of numerous time lapse recordings across multiple day conditions. The final three villages together also form a new set of typologies with characteristics different than previously documented villages in Stefan Al’s book. The villages also had enough usage to warrant a more intensive study.

DAXIN VILLAGE

Daxin village (大新村) is between Tongxia Village and Xinnan Village. Its main alleyway also cuts across north-south and is much older or in worse condition than the other villages. The village has a lower density in many pockets but also has a mix of tall, extruded buildings.

The entrance alley from Xinnan market is wide enough for ample parking. On its edges are a primary school with a shaded structure and a supermarket. Parked cars block access to the semiprivate space of some businesses, but the supermarket uses its own crates of produce to prevent people from blocking its entrance.

Of note, many of its businesses are never open. Many of the semiprivate spaces on the edge of the alleyways were enclosed and cluttered with storage. While the alleyway was much quieter, many residents still sat outside on narrow steps and under installed metal roofing with an impromptu produce stand (Figure 4-34). Even when a semiprivate space is enclosed before a residence’s door, one building builds an additional concrete pad offset from the ground for more potential space. In this case, the owner uses it as a small butcher’s table, and a meat scale is placed on the step into the house.

Figure 4-34
Urban Villages in Shenzhen and the city landscape. A is the studied urban village belt and Daxin Village. B is Baishizhou village. C is Hubei village. D is Jingying Village.
Along the main alleyway, taller buildings with steps and overhead building extensions were well used with individual adaptations when the fronting business or home was occupied. Passing social interactions were also common occurrences. As the alleyway approached to the next main road, the alleyway became busier, with restaurants along large setbacks. These spaces would be occupied by tables during the evening. Alleyways that branch off the main space often came upon larger wedge spaces that were used as collective semiprivate space. These wedge spaces are created when buildings meet at an angle, probably tracing back to the site’s original village plots. Many of these wedges were filled with storage and general clutter, but outdoor chairs and domestic furniture were evidence that the space could be for social and domestic uses.

At an intersection of alleyways, a trash pick up site coexisted with butchers, recyclers, produce sellers, and other foodstuff vendors. The intersection usually had trash and a lot of waste water from the vendors. Yet, even a small ledge allows a nearby worker to eat lunch on the corner of the trash facility.

For Daxin, despite its older condition, followed similar patterns of usage when its buildings and residual spaces resembled the conditions in the studied three villages. Daxin resembles Nanyuan the most, but did not seem to have any directly observable open spaces along its main alleyway. Enclosed spaces were often adapted to have additional semipublic space, either through additional steps or awnings, suggesting half walls are too high and do not promote the occupant’s desired indoor-outdoor relationship. As a counterexample, a semiprivate space with a ‘quarter’ height wall was well used as a tailor’s workstation and counter (Figure 4-34).

HUBEI VILLAGE

Hubei is located close to Luo Hu and is at the other end of the city from the Nanshan District. The village is divided by areas of different development stages; in the ‘preserved’ old

**Figure 4-35**

Examples of adaptations to open up enclosed private spaces in Daxin. In B, a woman sells fruit outside of the gated semiprivate space. A shows an active social life between neighbors. In C, the original semiprivate space has a low wall, occupied by a tailor.
section, an example of medium density village public realm is observable. This portion of the village lacks open space and its interiors are enclosed from the alleyway. During a rainy day of observation, there was not much public realm activity in its very narrow residential alleyways. In its market alleyways, there were plenty of unplanned adaptations. In the narrower market alleyway, movement was difficult due to the many obstructions.

In the narrow context, varied setbacks were particularly useful for informal vendors without a shop (Figure 4-35). Other stores push their counter space to the edge of the building’s footprint and use awnings to shelter a shopper. Some stores place goods past their store onto steps, protected by awnings and tarps. Even in poor weather, placement of unplanned adaptations resembled the observed patterns of the previous villages.

The crowdedness and numerous blatant obstructions into walking space are consequences of the intense use of a narrow pedestrian section. Without enough semiprivate space but at an intimate scale and high demand, the market spills almost everywhere. The market’s environmental conditions were overcrowded and can possibly be regulated through orderly implementation of semiprivate space.

**BAI SHI ZHOU**

Actually a collection of five separate villages, the whole area takes on a collective identity. The village is directly adjacent to one of Shenzhen’s premier neighborhoods, Overseas Chinese Town (OCT) and right off of a busy subway stop. The village was one of the earlier villages to begin developing and built factories during Shenzhen’s manufacturing boom. Current policy is moving most manufacturing functions outside the inner city, and many of these buildings were left vacant.

Bai Shi Zhou was not studied closely using the thesis’s framework, but the area provided alternative readings of the possibilities of ‘loose space’ in urban villages. Many of its open spaces were self built by the village collectives and unsurprisingly are well used with a diverse

**Figure 4-36**
Examples of adaptations and spaces in the older Hubei Village.
set of adaptations and activities because of its amenities and proximity to major flows of pedestrians. Bai Shi Zhou’s industrial buildings have been reused as creative loft space. New design firms have moved in, and an alternative library also occupied a factory’s ground floor. While still small, industrial repurposing is one of the ‘olds’ being solved; OCT Loft is a new development that preserves an industrial area and redesigned them as a creative hub. Occupants include restaurants, cafes, galleries, artist space, design offices, and boutiques. Industrial reuse is popular because the building shells are large and flexible, with ample open space between buildings. Within the village, some recent developments have begun to privatize space with gated courtyards and ground floor car parks (Figure 4-36f). While the street layout is preserved, such a mode of redevelopment erases the semiprivate, active street life.

**Figure 4-37**
Examples of different spaces in the diverse fabric of Bai Shi Zhou.
CHAPTER 4 | FIELD STUDY

JINGYING

The village is only one example of the many villages on the suburban fringes of Shenzhen, not located conveniently on any subway line. These villages still provide labor for nearby factories, and the street life is generally empty in its very straight alleys. The village is an example of a ‘newly’ built, gridded urban village. While the morphology uses steps and overhead extensions, the space is not at an intimate scale, and the edges are barely active. While these design elements create semiprivate space, their existence are not the only factor in creating successful street life. Furthermore, more research needs to be done on mostly residential urban villages; Nanyuan and Daxin were the most residential but had many active corner stores. All the retail for Jingying seemed to be near the street-width entrances. The implications of the village might suggest its undesirable location cannot support a diverse retail street life.

These four village examples provide a short overview of other village conditions that vary depending on development age and relatedly, distance from city center. Daxin added more potential data on how semiprivate spaces perform when enclosed. Many residual wedges were underused and cluttered but showed some addition of social and domestic use of its neighbors. This suggests possible intervention studies might be needed stake holder something to redesign these as small community spaces. Hubei village shows how the market alley can become too overcrowded and mismanaged with the lack of adequate semiprivate setback space relative to the commercial activity. Bai Shi Zhou reveals industrial spaces as another form of loose space being readapted in Shenzhen. Some privatized developments are examples of modern updates in the village. Yet the changes erase the semiprivate spaces that create active edges. Finally, Jing Yi, shows how the deployment of the studied elements do not necessarily alone create active streetlife in semiprivate space. These newly designed gridded villages lack residual space from varied setbacks.

Figure 4-38
Underused but wet gridded alley in Jing Ying.
5
FINDINGS AND RECOMMENDATIONS
CHAPTER 5 | FINDINGS

GROUNDING URBAN VILLAGES WITHIN EXISTING PUBLIC REALM GUIDELINES

This chapter positions the specific study of the Nanshan public realm with established and comparable research on similar urban spaces. It also helps position the context of urban villages in the broader discussion of civic and communal placemaking.

“Naturally the studies include areas and households representing a wide spectrum of cultures, living conditions, and economic standards. In addition, usage patterns and housing cultures change over time in step with changes in lifestyle, buying power, and demography. A well-rounded discussion about the function of soft edges in a residential context must include cultural and socioeconomic dimensions.”¹

Though Gehl acts as an authoritative voice on ‘human’ design of public spaces, he makes a critical caveat that public realm research in various contexts must be responsive to a cultural context and that his work should be used to guide further explorations.

The previous chapter and literature review on unplanned spaces suggests that cultural dimension of Shenzhen’s public realm is categorized with a high willingness of users to physically adapt space. Because of this, the urban village public realm analysis needs an updated vocabulary hybridizing ideas from existing pragmatic recommendations and more recent theoretical understanding of unplanned adaptations. The prevalence of unplanned adaptations in the public realm is defined by Franck and Stevens as a space’s ‘looseness’ where the space has an established identity or lack thereof until an unplanned use temporarily ‘transforms’ its identity.² A handrail becomes play equipment when a child gives it a temporary identity as a slide. A sense of place forms when individuals’ actions as a whole begin to shape a physical space’s identity. Looseness pluralizes and allows people of diverse backgrounds to contribute in unexpected ways to the public realm’s sense of place. The urban village with its numerous loose spaces becomes a dense urban laboratory used by both original villagers and rural transplants from all regions of China.

To study the urban village as an urban laboratory, this chapter integrates existing theories about public realm use with an updated framework that captures issues of the informal public realm: presence of physical adaptation; flexibility or articulation; stewardship or ambiguity of ownership; and equilibrium or instability.

‘Presence of physical adaptation’ describes whether a user has changed their space to use it differently. Adding furniture or extending an awning are examples. Flexibility describes this ability to transform or physically adapt a space for different uses. A completely empty space would have maximum flexibility. ‘Articulation’ refers to a granularity of physical elements in the public realm. An articulated edge would have more niches, openings, and subspaces than a non-articulated flat edge.³ Another similar way to define the edge is whether it is ‘hard’ or ‘soft’.⁴ Hard edges refer to traits such as horizontal, uniform,

¹ Gehl, Cities for People, 87.
² Franck and Stevens, Loose Space: Possibility and Diversity in Urban Life, 26.
⁴ Gehl, Cities for People, 79.
passive, and closed. Soft edges refer to traits such as open, interactive, varied, and granular. ‘Stewardship’ extends the definition of owned semiprivate spaces to include unregulated ways people establish personal territory in the public realm. Front yards, stoops, or porches are commonly part of someone’s property. The sidewalk or alleyway is beyond the lot line, but any physical adaptations in these spaces show how fronting homes and businesses claim territory in an unregulated way. Ambiguity refers to a condition where there is no obvious private steward in or fronting a space. Finally, ‘Equilibrium’ or ‘stability’ describes the condition where one or many activities or temporary adaptations occur at a regular schedule. When a restaurant sets out and stores tables every day and night in the alleyway, the temporary adaptation is in a stable state. The space also gains a ‘stable’ identity as ‘outdoor dining’ where regularity discourages other uses from moving in. An external shock can revert a space back into ‘instability’ or a state of diverse possibilities. Its identity reverts back to a ‘loose’ state.

DEFINITIONS:

*Pattern and Rhythm* - regularly scheduled events

*Flexibility* - the degree in which a physical configuration allows diverse use opportunities

*Looseness* - “the appropriation of public space for unplanned use” or the shifting reinterpretation of space or object’s identity or use

*Stability* - the degree in which a space maintains a certain identity either through pattern, rhythm, or physical installation

The previous chapter identified a few key physical typologies that affect general activity and unplanned adaptations. The next section discusses each typology to compare and contrast observations from this study with existing theories that relate activity with design. The similarities between general recommendations found in the literature and the results of the study of urban villages confirm some ways that physical elements affect public realm activity. Differences in finding suggest minor adjustments are needed. The comparison then inform a series of design recommendation for each physical typology. Meanwhile, where findings differ from the results predicted by established guidelines, minor adjustments are proposed to explain the result and enrich future designs.

1. STREET-SCALE TYPOLOGY RECOMMENDATION: SETBACKS

Create flexible varied setbacks to promote a diverse user base through layers of semiprivate and semipublic space.

Varied setbacks bring light and ventilation into the dense urban village while allowing businesses to create a dynamic street life directly at the edge of the alley. Villagomez asserts, at the right pedestrian scale, these “residual spaces” are opportunities for creative, minimal cost interventions and spontaneous adaptations.5 In *People Places*’ recommendations, users enjoy articulated benches and ledges that allow for different seating arrangements.6 Analogous


to sitters, different users prefer different sizes and shapes of semiprivate and semipublic space. Adaptations include advertising for the business, workshop space, logistics areas, space for informal vendors, and an outdoor market where the indoor store becomes ancillary storage space. Physical additions can even become permanent such as the low cost Xinnan supermarket addition that marks a neighborhood transition of consumer habits.

For street width alleys, extra articulation and turf marking is needed to prevent parked cars from overtaking or blocking space that could be used as semipublic space to activate the ground floor. Yet, the tradeoff of including articulated street elements prevents some businesses from operating, such as the car repair shop or other construction-related small businesses which diversify jobs beyond retail. The guiding principle should be ‘diversity’ of spaces to accommodate a wide range of users. Spaces should also have a diverse degree of privacy, layering semiprivate and semipublic space. The most flexible setbacks should be carefully located near urban village entrances and along low pedestrian traffic zones to allow workshops needing car access to operate.

Existing formal street edges need more amenities to fill their large setbacks. Pedestrian flow should directly front businesses and not be separated by a service road. New formal street edges should be designed with more variety in semiprivate spaces.

In the formal street context, the monotonous setback is usually a service road with parking. The sidewalk is either nonexistent or separated from the building by the service road, resulting in a dead space. In contrast, when the urban village meets the road directly, the public realm is occupied by the many narrow businesses’ diverse adaptations and social activities, buffered from the street by layers of trees and bollards.

2. BUILDING-SCALE TYPOLOGY RECOMMENDATION: OVERHEAD EXTENSIONS AND STEPS

*Use overhead extensions and steps to encourage active semiprivate uses along well-used alleyways.*

Overhead extensions primarily function as a way for upper floors to maximize interior square footage while leaving the ground floor navigable as a thoroughfare. Overhead extensions and temporary awnings or umbrellas protect goods and furniture from the weather; during frequent rains, users did not have to move their adaptations back inside.

Overhead extensions must be used at appropriate alley widths. Very narrow, 5-6 feet service alleyways, are blank walls that leave little room to use the space. People moving
through this space walk or ride their mopeds at relatively high speeds, since there is no room for visual interest to slow the user down. Overhead extensions in this case only cause the alley to be dark and provide no benefits. When the service alley is short in distance, it is fine for shortcuts and back door entrances. Long stretches are undesirable and make the alleys feel unwelcoming.

Building height should also inform whether overhead extensions are appropriate. In highly gridded, newer urban villages, the public realm space is bordered by overpowering seven to eight story buildings. Overhead extensions only block light, resulting in a dark and monotonous environment with little street life. Instead of a straight setback, overhead extensions on buildings at varied setbacks allow more daylight in and provide many additional semiprivate wedges.

An 8-12 feet in width alleyway is the ideal dimension for overhead extension space. Spaces under the narrow 3 foot overhead extension become filled with additional retail space and social spaces. Because there is little room for doors, ground floors often use rolling shutters. The openness of the ground floor creates a strong indoor-outdoor relationship that promotes active street life. Active street life can also be attributed to safer streets and increased staying power. The articulation of the building section creates a degree of human scale that mitigates the problems of a village building’s overbearing height. Users can ‘layer’ their uses differently, the closer semiprivate space as a screen and the wedge as a social space.

Steps should be paired with overhead extensions if the desire is to make semiprivate space

Figure 5-2
Variations of semiprivate space strategies.
explicit. Steps mitigate obstructions in busy alleys or pedestrian zones. Before modern drainage, steps into businesses were necessary to protect ground floors from being flooded by heavy rainfall. For daily life, these steps create an additional physical barrier between semi-private space and the thoroughfare, ensuring activities do not impede pedestrian movement through alleys.

Taller ground floors should be easy to adapt with temporary awnings to create an intimate scale. When the height of a building is one and half stories, 12-15 feet, ground floor tenants adapt the space through awnings, large overhead signs, and umbrellas. This pattern of use is similar to Gehl’s example of a sidewalk cafe that installed shrubbery and awnings on a “too large space” in a modern office plaza. Small spaces in a large space creates a pedestrian scale, but they also foster a flexible solution to divide public, semi-private, semi-public, and private spaces for different users.

The performance of semi-private space with built boundaries, such as low fencing or walls, is not as positive as Gehl’s results on partially enclosed semi-private space. Gehl’s study of Melbourne’s residential streets found streets with meticulously designed front yard spaces had the most outdoor activity. In the Melbourne case, 69 percent of staying activity happened on the semi-private edge rather than other parts of the street space. In the urban village though, these types of enclosed semi-private spaces are used as storage, creating an inactive edge.

When possible, an enclosed semi-private space should be paired with a semipublic step or overhead zone that provides an additional semipublic layer between enclosed porches and the public alleyway (Figure 5-1). In general, unnecessary enclosed spaces should be avoided. For buildings fronting a narrow urban village alleyway, the semi-private space only needs an overhead extension and step to promote active uses. The narrow, semi-private zone allows friends to pause and hold a conversation, but offers enough privacy for residents to feel secure.

3. NETWORK SCALE TYPOLOGY RECOMMENDATION: PEDESTRIAN WALKWAYS, ARCADES, AND CURBS

When paired with a shared street, curbed sidewalks and arcade spaces do not have to be used as pedestrian space. It can also be an effective tool to delineate temporary semi-private space in good weather conditions.

The usage of Qi Lou arcades as a pedestrian walkway or semi-private space depends on whether it is the best route for a pedestrian. Arcades in both the urban village and formal street section sometimes function as a double loaded walkway. More often, the arcade is creatively adapted as redundant or oversized pedestrian infrastructure. On pleasant days, people walk on the street, and the arcade space becomes a semi-private soft edge occupied by a store’s merchandise. During hot or rainy days, the arcade space becomes a desirable walking space again, and stores adjust their adaptations to promote pedestrian flow and customer traffic.

Street curbs that intend to separate vehicle and pedestrian ways operate similarly, since pedestrians prefer to walk in the street when car access is limited. Many fronting businesses then occupy the space between the curb and building with adaptations to extend their store space. Both of these recommended typologies require a parallel, safe walking space that
PUBLIC REALM USAGE IN INFORMAL AND FORMAL SHENZHEN

4. NETWORK-SCALE TYPOLOGY RECOMMENDATION: CORNERS AND ENTRANCES

Concave corners help fronting businesses claim space in larger setbacks. Extra niches or more setback space should be dedicated to corners and entrances, allowing informal users to operate without obstructing the intersection.

A study of street and alley corners reveals different uses according to their shape. Concave corners further shelter semiprivate spaces created by overhead extensions and entrance steps. Subdividing the edge of a larger setback with pockets to create corners promotes active, diverse street life (Figure 5-1). These features achieve this result because the ambiguous stewardship over a large setback space between a long, flat building edge and thoroughfare discourages semi-permanent, unplanned interventions. Concave corners articulate these large setbacks to shelter a greater range of semi-permanent unplanned uses that require more space than a narrow strip of steps.

Convex corners can be folded in or given more setback space to allow informal vendors to set up without obstructing the intersection (Figure 5-2). These corners are not clearly claimed by any steward but often help a temporary user find ‘support’ on their backside. The exposed space becomes a good spot for fleeting activities including people watching or informal vending. Informal vendors or lingering people-watchers prefer busy convex corners at intersections but often can get in the way of foot traffic.

Street corners at formal road intersections need additional protection from traffic; the guidelines of People Places’ corner plaza case studies in San Francisco call for adequate space and design articulation to shelter plaza visitors from traffic and maintain visibility between the plaza and street.

Lastly, thresholds between urban villages and the street create more opportunities for unplanned adaptations with corners and bollards. For example, bollards are used as resting places for people on mopeds waiting to give rides to people. Street furniture or trees at these thresholds group anchor unplanned uses to mitigate obstruction.

5. OPEN SPACES RECOMMENDATION

Sparser open spaces should be well located along accessible, major pedestrian flows. Pedestrians should see the space as convenient to cross or have some other compelling reason to be there. Blank, open spaces allow users to self-subdivide zones for diverse uses. Other open spaces should be ‘urban oases’ or highly articulated, vegetated, and high in amenities to combat abandonment and misuse.

Open space use is consistent with previous studies across most typologies and scales.
Spaces that follow basic guidelines for seating arrangement, climate, and human scaled articulation are frequently used. For open spaces, active edges and pedestrian access accommodate a wide range of activities and encourage users to linger. All the studied formal and informal open spaces have some human-scaled elements at buildings’ edges. Simple seating is used for a variety of seating arrangements and unplanned uses; in the formal plazas, continuous ledges were used for promotional materials, games for youths, running space for toddlers, and places to take a midday lunch nap. Conversely, the edges of the buildings adjacent to the open space that front the street had little amenities and were largely inactive without a restaurant’s own outdoor seating, as is the case for the commercial public space example.

Casual sitters prefer primary and secondary seating on edges, such as benches, curbs, or ledges, with their backs facing a wall or foliage. The main village plaza in both Nan Yuan and Tong Xia were exceptions where people sat on the curbs or a metal railing facing the action, with their backs against the flow of pedestrian and scooter traffic. This is not entirely unusual, since people may prefer watching activities in open space rather than traffic. Spaces exhibit gender differences as well where mothers prefer more sheltered seating while men watch street life at the front row. Social interactions mostly happen at major pedestrian flows. Climate-wise, during the cool season in Shenzhen, sitting in the sun is especially popular, and speckled shade during the summer largely determined where people would choose to sit. Given that there is an active mixed-use context and healthy flow of pedestrians, as is the case in the studied area near the civic-cultural center of Nan Shan, public spaces were well used when they generally follow the design guidelines of previous work in the subject.

While most observations are consistent with conventional wisdom, Chinese users are generally quite happy to adapt large open space for their own use by introducing their own toys and portable furniture that flexibly subdivide space.

Many of the spaces seem architecturally empty and large in scale relative to its context, including both the Nanshan Sports and Cultural Center Plaza (150m - 275m) and the Nan Yuan Urban Village plaza (20m x 40m). Thus the maximum dimension is larger than recommendations by previous researchers including Lynch (450 feet) and Gehl (70-100 meters). People Places suggests size does not matter but rather subspaces and visual complexity enhances use. Instead, most of the large paved public spaces lack seating amenities or objects of visual interest, with the exception of the ‘forested’ urban oases that use foliage and landscaping to subdivide the overall space.

Portable furniture is used to flexibly subdivide space. Cones mark spaces to practice roller blading and a boombox uses sound to mark space for yangge or aerobics dancing. Plastic chairs, baby strollers, or tiny portable stools make up for the lack of amenities. In the urban villages, these seats are provided by the ‘steward’ business of the plaza, a convenience store in Tongxia, a group of restaurants in Nanshan, and a children’s arcade in Nan Yuan.

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9 Lynch, The Image of the City.


11 Ibid, 22.
Design has less effect on usage patterns than previously thought for these examples. Plazas are usually empty due to poor location rather than poor design, where there are not enough people nearby or the space is too inaccessible, as is the case of the Shenzhen Civic Center Plaza or privatized gated communities. Small obstructions can have a large, negative impact on public space use; one of Nan Yuan’s pocket parks, though well located, remains empty most of the time because a line of cars blocks its access and there are no seating amenities.

Climate-wise, this suggests that large scale spaces in the right context can be well used during the cooler months and in the evenings. In the summertime, daytime use is uncomfortable due to the heat and lack of shade in the open plaza. Edges should be appropriately shaded to accommodate day time users during the summer.

Placement of open spaces should also be more evenly distributed rather than concentrated in newer developments, in order to promote a higher diversity and rate of uses. Open spaces enclosed by the urban village have higher rates of unplanned activities than spaces on the edge or entrance of villages or outside of villages but within 5 minutes walking distance. Nan Yuan village plaza is easily accessible but still within the village. The diversity of uses along the active edge is a signal of the village’s sense of ownership over the space. Domestic and commercial uses also overlap with social activities; spectating tasks such as sausage making is an example of triangulation and group identity building. Domestic chores done in the open allow villagers to socialize while running errands. Use of open spaces decreases even further when a user has to cross dangerous, non-yielding traffic. Open spaces within villages promote a sense of ownership needed to accommodate a diverse set of necessary uses. Open spaces outside or on the edge of villages struggle to create a similar sense of ownership.

Within villages, two open space typologies are needed to accommodate both environmental relief and active, social uses. Pocket open spaces within villages provide occasional environmental relief and have high staying power for small group recreational and social use alongside some domestic uses.

Central open spaces within villages are often used as a desired diagonal path between parallel alleyways. This flow of pedestrians creates Clay’s definition of an ‘epitome district’ which increases the likelihood for chance encounters. In an epitome district, the central open space establishes its identity through a display of diverse uses and conversations, where the whole rhythm of village life plays out. Patterns of use and frequent maintenance suggests open spaces in urban villages are possibly a point of pride and form of identity building; when asked, visitors to the open space expressed their enjoyment of the spaces. Village heads excitedly gave a tour of their ancestral hall, traditional village homes, and new businesses in the midst of redevelopment.

“I live farther away now, since rents [in the newer gridded urban village] have become too expensive nearby, but I still bring my son here to play. It is nice sitting in the sun with other mothers and it is quiet here.”

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12 Whyte, The Social Life of Small Urban Spaces, 94.

13 Clay, Close-Up. How to Read the American City, 39.
- When asked about the crescent plaza in Tongxia
Comfortable open spaces are still critical to satisfying “the need for contact.” By being around people and the neighborhood, residents reinforce community identity for themselves and share it with recent migrants who begin to assimilate into neighborhood culture. Often, spectators of all groups curious about life in public space will watch dancing from afar and even attempt to join in on the outside. To promote desirable unplanned uses, a space should be closest to its target population to foster a sense of collective stewardship and ownership.

4. THE VALUE OF UNDERUTILIZED SPACES: CONSTRUCTION SITE, ABANDONED BUILDINGS

Underutilized space along busy thoroughfares due to construction or abandonment can be used by informal vendors without other spaces to occupy. Allowing and promoting temporary uses along these underutilized edges creates streetlife in unexpected places and can help neighborhoods during its transition.

The most temporary and least planned spaces in the public realm seem uncared for and include construction sites or abandoned buildings. In the right context, these seemingly unused spaces become surprisingly quite lively. Tong Xia’s redevelopment has left many buildings unused and boarded up, creating unpleasant, boring stretches of empty village. A dark, dirty plaza with uneven paving never has anyone sitting or lounging in it during the day. Yet these spaces are the areas with the highest prevalence of informal vendors out of all studied spaces. When a void is left in an existing, well-trafficked space, it can naturally become a magnet for unplanned activity with nowhere else to go, defined in this thesis as second tier uses. Temporary structures from construction can also be adapted; in New York’s Chinatown, scaffolding was adapted to hang goods. Because the spaces are mid-transition, no one seems to care that they are taken over and given a temporary role as a secondary market.

Along formal street edges, a construction site entrance was used as a dance site. During the day at another construction site, a small crowd sat on chairs and gathered to watch construction. Other examples of these temporary and unplanned spaces include a disused bus stop repurposed as a snack stand spaces or spaces under overpasses used as a space for dancing.

The unplanned ‘second tier’ uses in these spaces tend to have potential negative impacts, from the noise of music from dancing to the garbage left by a snack stand. However, the benefits of allowing activities in these transitional spaces are potentially high. Demolition and oversized infrastructure both create voids in territory that can be claimed. While the ‘pleasant’ public realm accommodate a diverse set of recreational and social uses, underutilized temporary spaces allow fringe users to use abandoned space without encroaching on established territories and to minimize the impact of negative externalities.


THE CASE FOR THE ‘CHAOTIC PUBLIC REALM’

In the second section of this last chapter, the recommendations and usage patterns for each typology are generalized. This updated framework based on public realm and fluid identities also then re-contextualizes past and future roles of urban villages in Chinese urbanization. The relationship between the presence or the lack of physical details, the quality of the public realm, and usage patterns is critical to designing a more responsive public realm in the context of Shenzhen’s emerging urban class population.

PHYSICAL FLEXIBILITY AND ARTICULATION

A fundamental tension that emerged from the design recommendations asks to what degree should the public realm be articulated and to what degree should it be left completely flexible. Sometimes articulation makes a space more flexible for a new set of uses. The same articulation also prevents a space from accommodating certain adaptations and uses.

More articulation of space and amenities generally results in an increase in ‘first tier’ and semiprivate uses. First tier uses include generally expected social, recreational, or commercial uses in public or semiprivate space. These adaptations might obstruct pedestrian flow but otherwise do not negatively impact the streetscape. The articulated public realm’s primary role is to foster first tier uses and stewardship through semiprivate space and ‘pleasant’ open space.

Except for the occasional corner, the articulated public realm generally excludes informal ‘second tier’ uses. Urban village public realms foster necessary productive, logistical, and domestic functions through unstable space. These ‘second tier’ uses are often ugly, dirty, and even possibly dangerous. An outdoor wok stand emits heavy clouds of soot that makes eyes water and lungs burn. Sparks fly from a blow torch into the alleyway. While these can be painted in a negative light, they are also vital functions of the market, workshops, homes, and urban life itself. These second tier uses, in response, segregate themselves to less desirable locations, such as an unpleasant but highly trafficked plaza.

Gehl, Whyte, and People Places are largely concerned with promoting an active street life of desirable ‘first tier’ uses. When discussing the problems of large open spaces, conventional wisdom calls for more designed, human scaled articulation to maximize seating opportunities in public space. The definition of flexibility for these spaces is thus limited to a pre-programmed set of ‘pleasant’ social, recreational, and commercial uses. Conventional open space activity is about enjoying public space. Many unplanned activities are about using space for daily life that experiment with flexible spaces. Franck and Stevens describe many designed solutions as “controlled and pre-programmed ‘looseness’”, since “people can only appropriate spaces for their own uses if they have full access and freedom of choice.”

Urban village flexibility encompass a broader range of uses and is key to its affordability. Separation of land uses increases

17 Franck and Stevens, Loose Space: Possibility and Diversity in Urban Life, 25.
specialization, increases the need for more space, and thus increases the costs of space. Urban villages are affordable not only because they are very dense but because of the low cost of entry to adapt a flexible building space for a business, workshop, or home. From the last section’s recommendations, this same flexibility extends to adaptations of the public realm. For example, unexpected temporal pairings, such as parking by day and outdoor restaurants by night, reduce the need for separate, dedicated loading space and dedicated dining space, thereby reducing costs.

The case of the urban village asserts that both conventional ‘first tier’ and unconventional ‘second tier’ uses are difficult to initially design around. Businesses of different types and at different stages nimbly respond to external economic conditions and adapt to spaces in their own ways. Designing soft edges to meet the human scale can possibly hamper creative

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**Figure 5-4**
Recommended framework: strategies that balance flexibility with a desireable active public realm
interventions. While Sibelius Park in Copenhagen is successful, its articulated structure in a narrow alleyway space would create permanent spaces that cannot be easily adapted for a change in businesses. Both semiprivate and public space should be allowed to be adapted for individual use with temporary installations rather than inflexible barriers.

For open spaces, the blank Nan Yuan plaza owes part of its success to the impermanence of its articulation. The expansive Sports and Cultural plaza is large in scale but accommodates a wide variety of active recreational uses that the adjacent articulated, tree arena seating cannot accommodate.

**RECOMMENDED PHYSICAL FRAMEWORK**

When a small open space is densely programmed with preselected options, there is less room for alternative expression. Blank but small scale semiprivate spaces created by subtle variations in setback can change along with its neighborhood. Similarly, blank open spaces can be subdivided by their users without any need for a design intervention.

Very flexible spaces can accommodate uses that might have negative externalities. Diversity in the range of public realm flexibility creates good spaces for relaxing or socializing and also necessary spaces for life in a compact setting.

‘Undesigning’ the public realm has high risks. From the chapter on documentation, some degree of articulation is often necessary to provide a foundation for users to explore public space in novel ways. Many super block street edges are devoid of street life because they lack articulation. But these same street edges are also highly controlled and forbid informal users.

These underutilized spaces often are not part of an existing, active pedestrian flow. No visitors, unrestricted freedom, and lack of stewardship can create undesirable disorder or disuse. Disorder includes storage, rubble, and trash. For spaces with less traffic and no active steward, programming and physical design combats unwanted disorder, acting as the proxy for the community’s stewardship and care. Well designed articulation restricts the spectrum of opportunities in exchange for a pleasant, quiet space for semiprivate or open space uses with stability and rhythm.

There is no exact answer to balance between desired flexibility and uncontrollable waste, but a flexible structure can allow cost-effective intervention when needed (Figure 5-4). Active management of the public realm system can determine that balance. The structure would allow residents to identify areas that may require intervention where temporary ‘pilot’ projects can be first tested with easily removable interventions that articulate the edge or provide sheltered space to reassert public stewardship and care over the space.

**STABILITY AND RHYTHM OF SPACES OVER TIME**

Another dimension of a space’s ability to accommodate unplanned uses is the space’s stability over time. Stability is a form of ‘temporal’ flexibility to explain patterns of temporary adaptations. Along with a space’s
physical flexibility, users will also consider how long their unplanned adaptation can stay and whether they can use the space in the future.

Semiprivate space, or private stewardship over the public realm, allows a wide spectrum of activities for its ‘owner’. Semiprivate space can thus be described as stable in the long term. Their flexible physical characteristics allow their owners to adapt the spaces to their whims, and their stability over time assures the investment in installation will not be disturbed.

Alternatively, permanent physical articulation signal a collective ownership that allows the space to be accessible to all but limits the opportunities for unplanned adaptation, since claiming clearly public space might be taboo or illegal. Stability is also reinforced by regular events; evening restaurant tents replace daytime service uses like parking and food prep in Nanshan. In that particular case, the space has a stable schedule that limits other uses from encroaching. Those other

Figure 5-5
Relationship between flexibility and stability.
uses instead occupy corner wedges behind the ancestral hall.

Temporarily abandoned spaces, ambiguous service spaces, and transitional spaces under construction are in flux. These corners and edges with no clear stewardship again pose a certain risk and loss of control for potential unplanned users. Yet the benefits of allowing unplanned activities in these transitional spaces are potentially high, filling in gaps of service for users. Even some physically loose spaces that are unstable can be highly temporal in activity. Xinnan’s ‘garbage plaza’ is used as a social space at the intersection, and occasionally is serviced by a garbage truck. The social space transforms momentarily to sanitary infrastructure and quickly reverts after workers finish. During lulls in construction activity, the construction site’s inherent physical traits are useful. The turning radii necessary to service garbage creates open space that is left free to a variety of unplanned activities for the majority of time. Tong Xia’s derelict commercial plaza by day, adjacent to construction scaffolding, offer a space for a changing roster of short-term vendors to set up in the evening. A truck-sized curb cut that leads to a construction site is used as a space to dance when construction stops for the night.

These temporary spaces show how fixed patterns of activities leave gaps which become opportunities for fleeting usage at a very low cost of entry. In the main Xinnan Market, early evening marks the time when logistical space can be occupied by informal vendors. Territory and time of occupation are jockeyed over; informal vendors can be pushed out by licensed sellers: a balloon seller arrives earlier than the toy vendor in the department store plaza before being subtly pushed out. An informal vendor might occupy a corner for the evening but might not be there another day. Thus, the identity of a space constantly shifts depending on the different schedule of its rotating users, yet the aggregate identity might be interpreted as a free, loose space.

Temporary uses are moments of experimentation that have the potential to become more permanent and act as a catalyst for urban change. In these ambiguous spaces, the looseness at any moment can be taken away as regular patterns occupy the whole day. Looseness, the ability of a space to allow for unplanned uses, can also be seen in this temporal frame. Stability and pattern eventually erodes looseness with the creation of a fixed identity. The fixed identity disappears when the owner changes or the space is changed. One example of this process is Amsterdam’s transformed NDSM dockyard into a mixed use hall of alternative existing crafts and new recreational uses.

Temporary uses are not necessarily ‘an expression’ to vet what use might be a space’s best use. Instead, there is inherent value to maintaining a certain amount of temporally flexible spaces, though the exact spots transition in and out of permanence. Loose spaces disappear and regenerate as a natural byproduct of the urban village’s development process. These same loose spaces provide opportunities to reinvent individual space and community identity through low-cost adaptations and new uses, from abandoned waste lot to informal retail space and to potential cultural space.

Recommended Temporal Framework: In addition to flexible semiprivate spaces, a diverse public realm should have ambiguous spaces

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Figure 5-6
Plan to redevelop Tongxia. Yellow is paved open space, green is vegetated space. Elevated white space is private, recreational roof top space. Left: Activity and Land Use Plans of Tongxia (UPDIS)
that are both physically and temporally flexible to cheaply accommodate new users who might be excluded from semiprivate territory.

EVALUATING A REDEVELOPMENT SCHEME: XIA TONG

Now that we have seen the possibilities for the urban village in transition, the development scheme for Xia Tong can be critiqued through the new recommended framework on the flexible public realm.

The new development is a series of mixed use commercial-residential towers with ground floor retail on a new street, marked 1, running east-west. Between the new series of 22-44 story buildings are two levels of open space. The ground floor level open space is a public plaza with a rebuilt ancestral temple and primary school while connecting the fourth and sixth floors of developments is a series of raised open green spaces. The street following the current pedestrian mall, marked 2, is a series of green spaces with the occasional service road into underground parking and loading facilities for the buildings. On the other side is the original urban village fabric. The redevelopment mechanism pays each villager who currently rents out apartment space a certain amount for each floor and square meter of space, and the project does not seem to follow the Hu Bei or Huang Gang self-redevelopment model.

Initially, the plan seems to provide more open space than currently, yet now more space is purely dedicated to faster moving vehicular traffic. Villagers west of the new street will have to cross at unevenly spaced crosswalks to access the new public space. The context of the public space is also lacking in much definition, but it will not have active commercial uses which are limited to the road marked 1. The scale of the new retail strip is also unclear and will probably accommodate larger uses in the corner as anchors with supporting small shops along its sides and in an interior mall area, similar to most developments observed in Shenzhen. With proper detailing of steps and commercial frontage space similar to existing retail in the area, the street front can recreate a desired lively soft edges that promotes businesses to temporarily adapt semiprivate spaces with unplanned uses. For the open space, the lack of active uses or any ‘stewards’ leaves it at risk to be desolate and under used. Yet, the subdivision of its spaces from its ‘pinwheel’ arrangement of paths can allow for many articulated corners and edges. The separation of ‘prime’ public space above the public space disperses and segregates rather than assemble and attract. The top level of open space is too high for any visual interaction with the ground. The elevated open space at a lower height could become an interesting set of balcony spaces that allows for vertical, visual interaction, similar to the High Line in New York City.

The open space as currently drawn has too many ambiguous spaces with no articulation or possible moments of stewardship. A possible solution would be to convert more edges to active ground floor uses with clear stewardship that are not necessarily commercial. Verandas of community recreation space and even ground level residences with visible garden space, along with a corner cafe could activate the edge for this residential-office context. Accessibility is another challenge, since easy pedestrian access encourages users to walk through the space while running...
errands, which is a large reason why public spaces within villages are used more than edge plazas. By encouraging users to move through the space and use it for privatized means, other unplanned or social uses will follow, similar to the mechanism of Nan Yuan and Xia Tong’s existing plaza. Active edges are needed to promote temporary, unplanned adaptations of space to inject new uses and amenities into the flexible Chinese plaza model. Essentially, the plan’s problems stems from the inability of the medium to convey design standards for soft edges at the human scale, since the plan largely stays at the planner’s scale, a desire to make a beautiful plan rather than a functional, lively public realm. The plan should be early on conceived at the human scale section for all users rather than be freely interpreted later by outside developers who have little interest in accommodating existing urban villagers.

This brief physical design critique of a village’s urban redevelopment plan tests the framework proposed, a combination of existing research into the public realm with an added dimension of promoting unplanned uses observed in Shenzhen’s public realm. Unplanned uses are critical for the success of the flexible, empty open space model of most Chinese plazas and promoting stewardship of soft edges helps street edges maintain vitality in changing neighborhood conditions by allowing occupants to adapt their space at a low cost in the future for new business, cultural, or social ventures.

FROM THE PUBLIC REALM, IDENTITY BUILDING OF URBAN VILLAGES AS A WHOLE

The temporal dynamics of the unstable public realm inspires a more nuanced way to see the role of urban villages in city identity making. Urban villages as a phenomenon were instrumental in the development of South China’s urban economy, as a stepping stone for recent rural transplants and entrepreneurs to assimilate into the urban economy. Through different redevelopment phases, the village reinvents itself from agricultural roots, to dense housing, and even to specialized industries or commercial uses, such as the Da Fen painting village. The urban village thus falls within Jackson’s definition of a vernacular landscape. The vernacular is where reinvention and adaption are “of an involuntary, reluctant sort … an unending patient adjustment to circumstances … the absence of what we would call a future history.”

These piecemeal shifts in the village’s flexible structure allowed the village’s whole identity to shift naturally with the city, dependent on the whims of its occupants. Gradual shifts also move in multiple trajectories that pluralized the village’s identity with different cultures and lifestyles.

When the chapter of small-scale, short-term response to rapid urbanization ends, the urban village will be engulfed by the idealized, modern urban fabric of ‘towers in the traditional Chinese garden’ or downtown Manhattan. The village’s pluralized identity is replaced with a single idea of the modern Chinese city. Both sweeping modernist plazas and traditional Chinese landscaping resemble Jackson’s conception of “Landscape Two”, where design decisions are justified by an aesthetic ideal for identity and place making. Yet like most interpretations of the ‘modern Chinese City’, even

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20 Jackson, Discovering the Vernacular Landscape, 151.

21 “南山8街道创建‘样板村、样板路’ 6月开工年底完工。”
after development, residual space from rapid development once again allows for creative adaptation to find its place.

Chinese plans are often grand in scale but lack design fineness at the human scale. In one example, Weibo users’ humorously respond to bizarre implementations of national level requirements for tactile paving to help guide the visually impaired, sometimes leading the pedestrian directly into a tree in the sidewalk or into a ditch. 22 From Miao Pu, rapid ‘modernist window dressing’ development outpaced the people it is meant to house, creating large amounts of wasted space that does not accommodate users.

The physical manifestation of shifting whims and needs begin with temporary adaptations that may eventually become permanent. Looming, blank slate, redevelopment shocks and destabilizes this previous framework of gradual transformation.

Yet even this short period of shock acts as another moment for opportunities during transition. Taipei’s development moratorium on an ecologically sensitive, ‘exiled’ Shezi Island created a planning lag, where “pending status is prolonged into normalcy.” 23 The residents of the island respond to this spatial limbo by temporarily adapting the space around their lives while waiting for any decision making from planners, resulting in an ‘anarchic, careless’ space. A similar attitude towards inevitable but ambiguous future plans generate an “uninspired” insurgence of temporary adaptations. Villagers can only respond when development schemes finally do emerge. Even after development schemes are submitted, these villages will most likely slowly transition out with a similar vagueness as Tong Xia in implementation, especially if Chinese market forces do not coincide with the plan’s timeline. A dichotomous interpretation of space emerges: a vendor selling deeply discounted clothes occupying a previously abandoned business’s empty shell shouts, “There is no need to come back tomorrow! One time sale!” yet she is there the next day and the day after. The urban village in the moments of pre-redevelopment marks an interesting chapter that would benefit from further analysis.

This state of limbo inspires a wide range of alternative responses in identity creation. When asked about new development, many migrants and villagers showed positive or ambivalent attitudes towards the inevitable redevelopment. Despite being displaced in the future, the steward of Tong Xia’s crescent shaped plaza expressed the redevelopment as a matter of fact, predicting it would be completely demolished by the new year. She really likes the small plaza and speaks fondly of the mothers from the community who visit, yet she did not have any formulated, expressible opinion (or was unwilling to share). Village leaders in Hu Bei’s management company adopt an identity of optimism for a bright future where their family’s pride is expressed by the meticulously crafted scale sales models for residential apartments. Others seek identity through activism when development plans begin to solidify, as in Bai Shi Zhou’s Handshake 302 program that seeks to preserve aspects of the village’s


industrial and community history through art, moving from the “uninspired” insurgent space to “inspired” collective memory.  

‘Spatial limbo’ can be extended as an unstable, in-between identity that encapsulates Shenzhen’s urban villages’ entire developmental history from the 1980’s onwards. Urban villages have always been a transitional space between the rural and urban that never were planned to be permanent. Cities lacked the funding at the time to buy out villagers and merely pushed the issue to a later time, often marking land use changes in the masterplan without concretely acting on it. This temporal attitude allowed villages to develop through the collective actions of many individuals, with no overarching plan from the city. Unplanned adaptations are experiments in the public realm that share this pluralized, dynamic identity with the rest of the city. Villagers are not confined to urban villages as if they were islands, and people living in towers also enjoy visiting the markets and public spaces of villages.

“You have the name of the village wrong! It’s Nan Yuan! You must be lost. I don’t live in this village and I actually walked here from the subway. I like sitting here even just browsing on my phone watching people on the plaza. You should come by in the evening. A lot of funny old ladies like to dance here. If you need to know where the exit is, I can show you. Follow me!”
- Young Woman in Nan Yuan Plaza

“My mother often goes here to shop” “Deep breath of life” “Businesses is fiercely competitive, and the people’s hardships resonate the entire alley. But these busy people face life with a confident, calm behavior, regardless of the weight of hardship, truly resilient.”
- Quotes from a Shenzhen forum about Xinnan Market

Different urban environments exchange ideas and possibilities, preserving a culture of collective ownership over the public realm and willingness to personalize expression in the public realm. Mixed social groups also bridges economic divide and can help develop mutual understandings of a unique pluralized city identity rather than a borrowed identity from abroad. Rather than question the existence of urban villages, ‘spatial limbo’ reasserts the need for cities to retain some flexibility. ‘Urban village life’ challenges the status quo, permanent developments around them where patterns of small, unplanned adaptations still pop up in formal space. Repeating Pu Miao’s words on solving poorly designed Chinese public space, “the true solution lies in the emerging urban middle class who will claim their ownership in the public domain.”

AN ALTERNATIVE DIRECTION OF THINKING

Urban villages are not an artifact of the past despite being lambasted as one of the ‘olds’ by Guangzhou’s policy. The updated urban


25 Pu Miao, 205.
village is constantly reimagined and reinterpreted alongside the city. Reevaluating the role of urban villages is the first step to coming up with possible solutions. This section begins by looking at how the two other ‘olds’ have been reimagined through intervention. The section ends by proposing new directions of design and participatory research to better imagine the future role of urban villages.

OLD INDUSTRY

Other ‘olds’ have been reimagined in ways that brought unexpected benefits to cities. Old ‘industry’ is quickly phasing out of Shenzhen and being replaced by ‘new’ creative and high-tech industry. Two creative spaces in Shenzhen act as counterparts in the narrative of ‘old’ industry’s fate. The entire Qianhai Development is built from a blank slate and part of a master plan on a far west edge of the city. High-tech and creativity is pigeonholed into a certain, borrowed aesthetic identity that resembles Silicon Valley. In contrast, a global phenomenon of reclaimed industrial architecture has influenced the conception of OCT Loft. This lifestyle and creative hub consists of renovated industrial buildings, transformed into offices, workshops, galleries, and restaurants. The space between buildings is filled with new landscaping, public art, and amenities. On weekends, a line of tents set up an impromptu market, often as small outposts for the many businesses in the industrial loft spaces. The phenomenon is not new in China either when considering the renovated warehouse art space, Beijing’s 798 District.

OLD NEIGHBORHOODS

Reclaimed industry transform abandoned spaces, but approaching populated urban villages and historical districts with the same strategy is more problematic. Shanghai’s Xin Tian Di is an example of the third ‘old’ or old neighborhood. The project preserves the historical architecture and scale of the original shikumen courtyard houses, but the identity and use of the space as an affluent lifestyle center is part of a larger government agenda for ‘economic upgrade’, and its structure becomes inflexible to only allow a certain set of business types. The space becomes exclusive and is not designed for the lifestyles of Figure 5-7

Images from Qianhai Innovation Hub (Top) and OCT Loft (Bottom).
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displaced residents. Reclaimed industrial creative space is vulnerable after a time as well. A criticism of Beijing 798 as a reclaimed industrial space is that once the space becomes ‘established’, its spirit as a space for artistic experimentation gives way to a consumerist, pre-programmed set of uses and interpretations, compared to the gentrified fate of New York’s SoHo. As an alternative, Shekou’s Hong Kong-Shenzhen Bienale is an ultimate expression of temporality in space, where an old flour factory is transformed into an art-architecture-planning exhibition. Playful, experimental, and busy with practicing workshops, the space lights up and disappears as quickly as it appears. For a brief moment, a derelict industrial park became a hub of creativity, and when the event ends, the space returns to flexible possibilities.

WHAT IS REDEVELOPED OR PRESERVED?

Redevelopment and displacement are socially problematic because original residents lose access to amenities and jobs. Reclaimed developments often prioritize architectural preservation over the preservation of a diverse, mixed user profile. Onsite relocation in unresponsive modernist forms without adequate semiprivate and public realm space also can fail to create effective environments for the original residents’ previous lifestyle. Scale of the project becomes critical to the balance between


economic development goals and the preservation of diverse, flexible communities. The physical structure of the urban village already accommodates a wide range of uses, where small redevelopments add up. Total redevelopment in one action endangers the community’s existing social and economic fabric.

For urban villages, preservation of the building as an ‘artifact’ makes little sense, since many of the buildings are built poorly and not made to last. Instead, a focus on translating the identified, key physical elements through gradual transition can bring strong economic and social benefits while mitigating wide-scale displacement, just as urban villages have reinvented themselves organically by multiple actors. Some urban villages closer to Shenzhen’s central business district already are homes for recent college graduates and professionals who live alongside other migrants and villagers.

A loss of the design language and culture of semiprivate spaces can eventually result in the loss of the dynamic social realm that other cities are trying hard to reclaim. Though not a direct comparison, the loss of bicycle infrastructure in Beijing sped the process of interpreting the bicycle from a modern object to an object of the past, replaced by ‘car pride’. A loss of the dynamic physical environment may result in a changed attitude towards the use of the public realm, resulting in the decline in unplanned uses of the public realm. Many of the public spaces in a different cultural context would not be used at all, but the willingness of Chinese users to adapt spaces with their own personalization keeps blank spaces active. Adriana Aker’s thesis studied Beijing’s traditional hutongs and found in modern gated communities without the human-scaled semi-private space from communal, court yard life, residents could not find good spaces to engage with their neighbors, many of whom were strangers to each other. Older generations will eventually leave, and younger residents might lose the same appreciation for life in the semiprivate space, evident even by the lack of conversations in elevators, one of the last remaining well-used shared space in a residential tower.

Fu Long Wu suggests policy makers favor village-corporation redevelopment which generates more land supply and promotes ‘economic upgrade’ when affordable housing for migrant workers is erased. Economic upgrade refers to a transition from manufacturing uses to a technology and creativity based economy. With the erasure of urban villages, loss of affordable housing is not the only social cost. Beyond the architecture, these neighborhoods are desirable because of its culture and street life, aided by the human-scaled elements of its building and urban fabric’s design. These established neighborhoods are also part of a context, a complex network of paths, landmarks, and relations.

Poor copies of New Urbanist physical morphology placed in a contextless location often defeats the purpose of the strategy if broader connections are not thought out. Moving urban villages to the fringe drains their user base and the village becomes detached from people in other parts of the city who frequent its markets and neighbors. The Qian Hai Enterprise Dream Park and Youth...
Entrepreneur Innovation Hub also suffers from being opened in a contextual-less vacuum while OCT Loft rehabilitated existing industrial buildings in a busy residential, central location that attracts people from around the city. From an interview with Shenzhen’s urban renewal office, rapid transit expansion is seen as the affordable housing strategy, justifying the removal of urban villages to developments at the fringe. While villagers can take transit across the city, the results from chapter 3’s documentation process showed different usage patterns between centrally located villages and villages on the fringe. Thus the transit strategy may not be an effective way to preserve villager lifestyles or village culture. A diverse market and public realm depends on a large user base, and residents from all parts of the city seem to enjoy participating in the diverse options of markets, street life, and open spaces.

SMALL SCALE ECONOMIC IMPROVEMENT

As an alternative model to demolish-and-rebuild redevelopment, economic and environmental improvements can follow the same process of reimagining space as temporary installations do in the public realm. As an architectural proposal, a new building typology based around the flexibility of the urban village’s buildings and public realm could become entrepreneur incubators and small business centers. Clusters of redesigned buildings at the scale of the village parcels could become nodes of start ups and small companies within the city rather than contribute to additional sprawl at the fringe. These small companies within the village can exchange ideas, advice, and labor with village businesses, from skilled craftsman knowledge to navigating China’s difficult financing process for small business growth.  

While additional design research and stakeholder studies would need to be done, sustainable economic development in urban villages might be achievable with more gradual, targeted interventions.

SMALL SCALE ENVIRONMENTAL IMPROVEMENT

Environmental improvement strategy can also be clustered and distributed. Many of Nan Yuan’s pocket parks were built on abandoned lots. Other abandoned old one story structures are already used as gardens in a ‘ruin’ where trees peek over its walls that adds a spot of green to a narrow alleyway. Kinoshita and Hayashi explain in two separate essays ‘Machizukuri houses’ and ‘Niwa-Roju’ as part of a ‘new public’ in Japanese cities. Both speak about how private houses or private yards can be used to enhance the public realm. Machizukuri houses as a model can extend the public social life of many ground floor residences in Nan Yuan Village, with the creation of new social services or meeting spaces, based on citizen participation and consensus which can fill potential gaps left by authorities. Kindergartens, primary schools, and other social services are already self-built by many villages who use rent money to improve their community. ‘Niwa-Roju’ examines how private gardens can be made to serve the public realm through environmental enhancement, such as a large

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tree that extends out or even the conversion of a private car park into a corner pocket park.  

**REIMAGINING PLANNING IN THE URBAN VILLAGE**

Comprehensive planning of the urban village must rethink the role of the public realm in such narrow conditions. While chapter 3’s documentation process of ‘zones’ and typologies was illustrative, suggestive zones for where unplanned activities should be allowed or banned could solve congestion and mitigate environmental issues of some uses. Privatized spaces also create blank edges and can be restricted to certain areas of the neighborhood. Uses directly compete for space, and public realm management could have its own code for right of way, semiprivate space, and public space dedicated for socializing and relaxing. This new code would preserve active street life and connections in the village even as the buildings and occupants change. Similar to form-based codes, a visualized ‘place based codes’ of zones and physical elements is needed to preserve and manage active edges. A process could map out the existing conditions of a village and use the map as a guide for stakeholders to identify weak and strong points. From there, the existing village is transformed and reimagined on paper through discussion before implementation. Conflicts over space, congestion, and sanitation problems can be reduced when involved stakeholders understand the rules and regulations they themselves helped to create. Ratios of ‘quality’ open space to ‘flexible’ open spaces can be debated and gradually changed over time, depending on the characteristic of the growing village.

Such a process can become exclusive and time-consuming for the average resident; visualization simplifies complex topics so they remain accessible to all participants. After an initial code is established, future transgressions signal a potential problem with the code which can be altered later. To be accessible, the planning process needs to also engage in more imaginative ways that bring very diverse groups of people together into a pluralized understanding of the village’s current and future identity. One important question left unanswered is whether migrant residents feel excluded from the formal public realm. Mary Ann O’Donnell, an activist who has lived in Bai Shi Zhou and documented Shenzhen’s urban villages, co-curated Handshake 302, which shows how the use of art, guided tours, and workshops begins to shape residents’ perception of their own neighborhood. Projects such as Accounting and Baishizhou Superhero allow residents to reimagine the daily struggles and role of their neighbors, gaining a deeper understanding of their community. The project also inspires questions about the different identities of the village created for the migrant population versus the original villagers, a topic worth exploring deeper in future research.

The goals of these projects are not nostalgic but forward thinking. They aim to use the revealed layers of history and collective memory to generate discussion of “a sense of future history” or the ability for the community, both migrants and villagers, to shape its own ‘inspired’ fate rather than policy makers. Planning of these new, nimbler developments should reach out to the ‘unplanned users’ which include migrant workers who currently

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are left out of the participatory planning process when discussing urban village redevelopment. Dialogue between newcomers, the urban class, old villagers can continue a cultural lineage of unplanned adaptations. Claiming rights to public space and control are natural parts of life in the spatial negotiation over public realm. While the younger urban class may find it problematic, mutual understandings between all parties can be reached through creative, more visual dialogue.

During a conversation with a young woman about the plaza Nan Yuan, her face lit up with excitement. As a last note of optimism, young people already have a curious appreciation of the active street life in urban villages even if they cannot explain it - a feeling of belonging with a city.


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CONCLUSION AND FUTURE DIRECTIONS
This thesis is only the beginning of a discussion for village-specific design recommendations. A new model of affordable, Chinese urbanization will emerge to replace the urban village model, but whether it can preserve a culture of active street life and low-barrier entrepreneurship depends on further study. More research is also needed into citywide ‘pocket’ environmental and economic interventions within urban villages that can preserve flexibility and low start-up cost advantages from unplanned adaptations. Finally, a culture of participatory design is not common in Chinese urban design, and additional work needs to engage residents in creative ways that diverse populations can all understand.

While architecturally the new model will be different, the thesis emphasizes the need to translate the public realm concepts of the urban village or of other models such as Beijing’s hutongs to preserve an active, flexible public realm. Preservation in China is not only about keeping historical architecture. Active street life and flexibility through temporary, unplanned adaptations allow dense communities to share resources and reduce costs. Past models can inform future models where possibly digital technology encourages a shared economy of equipment and space. In urban areas, smartphone penetration rate is near or already exceeds 90%. Technology does not replace social contact, and while many young people are using smartphones in public spaces, they are on their way to meet someone or reading emails while being a part of the plaza and city. These public-semi private spaces can fulfill multiple roles and be changed easily for a different use. They only need the space to use technology to enhance their social wellbeing.

Further research is needed on the effect of regulation and rules on public realm usage and adaptation. Coding and intentional design might erase perceived flexibility. A purely physical translation of the design recommendations will not work, and the designer must remain skeptical. Instead the model depends on the interaction between physical, cultural, and social aspects of the public realm. Finally, villagers might not currently understand the value of these flexible spaces. Similar to the Bai Shi Zhou Handshake 302 project, public participatory art and planning initiatives are a possible tool to have a conversation about the desired flexibility in the public realm.

A first experience walking through an urban village can be a mix of shock, confusion, wonderment, and curiosity. Diverse neighborhoods have the possibility to inspire and promote a willingness to explore outside one’s own space to discover a shared identity in public space. Instead of.dreading the loss of urban villages, the language of its public realm already appears in new streets and plazas. Urban villages have had a dynamic history, and have not fallen behind. Instead, in many ways, it can provide a model for the future when people rediscover a different culture of urban life for themselves.

APPENDIX

BIBLIOGRAPHY


