
Gregory Marinic,¹ Rebekah Radtke,² Gregory Luhan³

¹University of Cincinnati
USA

²University of Kentucky
USA

³Texas A&M University
USA

Abstract

Across time and cultures, the built environment has been fundamentally shaped by forces of occupancy, obsolescence, and change. In an era of increasing political uncertainty and ecological decline, contemporary design practices must respond with critical actions that envision more collaborative and sustainable futures. The concept of critical spatial practice, introduced by architectural historian Jane Rendell, builds on Walter Benjamin and the late 20th century theories of Henri Lefebvre and Michel de Certeau to propose multi-disciplinary design practices that more effectively address contemporary spatial complexities. These theoretical frameworks operate through trans-scalar means to resituate the built environment as a nexus of flows, atmospheres, and narratives (Rendell, 2010). Assuming an analogous relationship to the contemporary city, critical spatial practices traverse space and time to engage issues of migration, informality, globalisation, heterotopia, and ecology. This essay documents an interdisciplinary academic design studio that employed critical spatial practices to study correspondences between Chinese and American cities. Here, the notions of urban and interior are relational. Urbanism and interior spaces are viewed as intertwined aspects in the historical development of Beijing hutongs and Cincinnati alleyways. These hybrid exterior-interior civic spaces create sheltered public worlds and socio-spatial conditions that nurture people and culture.

Keywords: critical spatial practices, hutongs, alleyways, design, preservation

Correspondence Address: Gregory Marinic, College of Design, Architecture, Art, and Planning, University of Cincinnati, USA. Email: marinign@ucmail.uc.edu
Introduction

Across time and cultures, the built environment has been fundamentally shaped by forces of occupancy, obsolescence, and change. In an era of increasing political uncertainty and ecological decline, contemporary design practices must respond with critical actions that envision more collaborative and sustainable futures for the built environment. From a historical perspective, Walter Benjamin (1999) worked in this manner to uncover new perspectives on urban interiority. He framed an alternative way to not only see but to understand how space is participatorily shaped in interior spaces within urban domains. His theories shifted scales to narrate an alternative socio-spatial perspective on consumption and daily life.

The concept of critical spatial practice, introduced by architectural historian Jane Rendell (2010), builds on Benjamin and the late 20th century theories of Henri Lefebvre (1992) and Michel de Certeau (2011) to propose multi-disciplinary design practices that more effectively address contemporary spatial complexities. These theoretical frameworks operate through trans-scalar and interdisciplinary means to resituate the built environment as a nexus of flows, atmospheres, and narratives (Rendell, 2010). Assuming an analogous relationship of these theories to the contemporary city, critical spatial practices traverse space and time to engage issues of migration, informality, globalisation, heterotopia, and ecology. These approaches blur disciplinary boundaries to interrogate and transform the socio-economic conditions of the sites in which they intervene. These practices seek alternative provocations through curiosity in emergent spatial phenomena that reveal latent, fluid, and indeterminate influences. Holistically speaking, they amplify the current discourse on socio-spatial sustainability within urban public space (Feliz Arrizabalaga, 2020).

In their edited compilation, The Unknown City, Iain Borden, Joe Kerr, and Jane Rendell look beyond the conventional design process to propose multi-layered ways of measuring and responding to the urban experience (Borden, Kerr, & Rendell, 2000). Inspired by the theories of Henri Lefebvre and tactics of the Situationist International, the book is a social critique on how spatial production can and should transform design practices. Working in this manner across an expansive domain, critical spatial practitioners include architects, planners, designers, artists, geographers, sociologists, anthropologists, activists, and others who pursue a transdisciplinary range of observations and interventions operating in marginalised, temporal, appropriated, and contested spaces. Collectively, these practices confront questions surrounding social justice by asking:
How can design enhance diversity and rights-to-the-city? Who are the stakeholders, and how do they interact? How do collective actions of appropriation, subversion, and empowerment confront crises at various scales?

This article documents *Global Studio: Beijing*, an interdisciplinary academic design studio that employed critical spatial practices to study correspondences between Chinese and American cities. Here, the notions of *urban* and *interior* are relational, whereby urbanism and interior spaces are viewed as intertwined aspects of Beijing *hutongs* and Cincinnati alleyways. With specific regard to interior urbanism, the contemporary notion of hybrid interior urban space traces links to Le Corbusier’s interest in transposing traditional urban components to building interiors (Martinelli, 2019). These hybrid exterior-interior civic spaces create sheltered public worlds and socio-spatial conditions that nurture people and culture. This research expands an awareness surrounding interior urbanism vis-à-vis how it intersects with conventional understandings of urbanism. Our academic studio did so by studying urban interiority through the comparison of two dense city centres—Beijing and Cincinnati—situated within remarkably different cultural and geographic contexts.

**Intertwined Typologies**

The earliest forms of laneways trace their origins to the Indus River Valley civilisation (Morris, 1993). Laneways spread from east to west as civilisations established cities. In the Greek and Roman empires, narrow laneways were an integral part of urban morphology across the Mediterranean basin. In the Middle Ages, laneways formed footpaths in informal settlements that were later formalised as streets during the Renaissance. After the Great Fire of London in 1666, building regulations created the *mews*, which offered rear access for deliveries and servant routines (Morris, 1993). Mews were typically banded by rows of two-story carriage houses with storage below and servant quarters above, accessed from a narrow, double-loaded cobblestone pathway. Transferred through British colonisation of Australia, Canada, New Zealand, Singapore, the United States, and elsewhere, laneways—or alleyways—continue to function in these countries much like their English precedents.

In the United States, alleyways generally serve as functional service zones used for discreet trash removal and utility access. Cincinnati is a prototypical, mid-size American city characterised by a complex system of urban alleyways. The abundant downtown alleyways were originally established to serve grand residences with carriage houses and hidden backdoor access (Carney, 1976). As residential
blocks were incrementally transformed by the growth of the Central Business District; these alleyways supported commercial deliveries and fire protection (Carney, 1976). Beginning in the 1970s and gaining momentum in the early 2000s, the historic preservation of residential, civic, and commercial architecture throughout Cincinnati became a priority. The urban core benefits from its significant Victorian era and pre–WWII building stock that is among the densest, largest, and most impressive in North America. The Over-the-Rhine neighbourhood, in particular, once home to immigrants from Germany, Ireland, and Italy, as well as African Americans and Appalachian mountain people migrating from the American South, has witnessed dramatic—and contested—gentrification. Likewise, the alleyways of the Central Business District, Over-the-Rhine, West End, Queensgate, and Mount Auburn neighbourhoods have incrementally revitalised with new bars, nightclubs, restaurants, and residential projects.

In China, Beijing has been the focus of national growth for several centuries (Wu, 2001). This ancient city of over twenty-one million people has been shaped by a complex history of politics, planning, development, and demolition. Its urban morphology has evolved through the ongoing aggregation of diverse spatial conditions ranging from imperial palaces to vernacular forms of architecture. Its density encourages an interior urban spatial development that is variously fully or partially indoor. Marco Polo (1254–1324) marvelled at the metropolitan interiority of Beijing by proclaiming, “…the whole interior of the city is laid out in squares like a chessboard with such masterly precision that no description can do justice to it” (Wu, 2001, p. 48).

In Beijing, landscapes incrementally became encapsulated by city walls, imperial palaces, metropolitan infrastructures, and courtyard houses to create complex interior spaces at the urban scale. Residential pedestrian networks developed through interior urban configurations in the form of hutongs. Centuries-old hutongs were incrementally built during the Yuan dynasty (1279–1368) and expanded in the Ming (1368–1644) and Qing (1644–1911) dynasties (Meyer, 2009). These residential courtyards and alleys share notable spatial qualities with both the Forbidden City and urban parks.

The etymology of the word hutong is traced to the Mongolian word for “water well,” or “path between tents,” or from a Chinese word that described narrow footpaths that acted as firebreaks for the thirteenth-century capital city of Kublai Khan (Meyer, 2009, p. 48). Beyond the confines of the Forbidden City, Beijing grew incrementally through aggregated hutongs. Byways were established to connect
parallel hutongs that often ran uninterrupted for over a mile from east-to-west (Meyer, 2009). A series of seventeenth-century imperial edicts originally prohibited theatres, hotels, restaurants, teahouses, and ultimately, all ethnic Han Chinese within the royal precinct of the Forbidden City (Holdsworth, 1998). Displaced people and businesses migrated to the Dashilan hutong that was home to variously dirty, marginalised, or illicit activities, including blacksmiths, calligraphers, brothels, and opium dens.

As a multi-layered typology of interior urbanism, hutongs intermingle courtyard architecture with laneways, micro-landscapes, and organic interventions into larger urban configurations. Hutongs systematise low-rise courtyard houses, retail buildings, and sacred spaces into finely-grained neighbourhoods. Shaded by rows of trees and circumscribed by substantial masonry walls, many of their laneways are too narrow for vehicular access. The fragments of these networks proliferate throughout central Beijing and embody the timeless economic, social, and cultural vitality of the city. Although hutongs are diminishing with rapid urban growth and the development of high-rise residential superblocks, preservation and adaptation efforts continue to persist. Those hutongs that remain, however, represent thriving examples of a diverse vernacular and sustainable network of communal interior-exterior spaces that serve as a model for urban regeneration. Activated by small businesses, restaurants, and street vendors, these spaces support entrepreneurship and create arenas for complex social interactions.

Since the 1949 revolution, the ageing neighbourhoods and vernacular urban fabric of Beijing have confronted ongoing challenges linked to complex political, planning, and developmental policies. During the 1950s and 60s, many historical sites in the central core, including gateways, temples, ramparts, memorials, and courtyard houses, were demolished in the name of progress (Li, Dray-Novey, Kong, 2008). The unprecedented expansion of the Chinese economy since the 1990s has further diminished the historic urban qualities of the city. Thus, hutongs have faced unprecedented erasure. In 1949, Beijing had more than 7,000 hutongs, and by the 1980s, only 3,900 remained (Wang, 2010). Translator and journalist Xiao Qian (1910–1999) lamented in his book, Old Beijing and Its Hutongs:

Those narrow lanes and alleys, or hutongs, are civil structures left over from the ancient middle times. I have seen quite a lot of lanes or alleys in ancient foreign cities such as London and Munich. These are always improved with repairs. If only fewer hutongs are demolished! If only more of them are preserved! (Wang, 2010)
Why have sites of historic architectural heritage such as gateways, ramparts, temples, memorials, siheyuan courtyard houses, and hutongs been torn down? How can design practitioners and residents respond through critical spatial practices? In recent years, a consensus surrounding the preservation of cultural heritage has gained urgency in China. This interest includes not only an appreciation of precious architectural landmarks, but also embraces the value of everyday memorials, buildings, and hutongs. Cultural critic and writer Feng Jicai remarked at a meeting of the National Committee of the Chinese People’s Political Consultative Conference:

Among historical remains found in a city, relics and culture represent two different concepts. Cultural heritage sites and relics are classic humanistic creations, of which imperial and religious structures are the most outstanding representations. The local culture, however, is represented by residential structures. In residential structures, we find a trove of historical and cultural gems, the flesh and blood of history, things that embody the kind of spirit that makes the city different or even unique. Take for example Beijing. The soul of the city is not to be found in the Temple of Heaven or the Forbidden City. It is epitomized by the hutongs and siheyuan courtyards. In China, cultural relics are protected, but local cultures are not. Residential structures can be demolished at will because they are not seen as cultural relics that deserve protection. The problem is getting increasingly serious, to the extent that even residential structures designated for protection can be torn down at will. (Wang, 2010)

There is a rising support to preserve and enhance the hutongs with improvements ranging from general repairs to private bathrooms. Nevertheless, there are equally strong sentiments claiming that hutong preservation romanticises primitive conditions and tolerates injustice. These voices believe that hutongs are substandard living environments that should be replaced with new social housing. This point of view rejects the lens of cultural heritage to assert that hutongs are an outmoded form of urbanism promoting unsanitary conditions, poverty, and stigmatisation.

A [Critical] Provocation

This interdisciplinary research-driven studio situated itself in the conviction that historic urban laneways offer unique opportunities for preservation and revitalisation on a global scale. It pursued a comparative study of the Beijing hutongs and Cincinnati alleyways.
by asking: How can the thriving Chinese hutongs prompt a reassessment of underutilised American alleyways? Hutongs catalysed an interest in rethinking the laneways-alleyways of Western cities to promote urban densification, social activation, and revitalisation through interior urban thinking. Despite their similar scale, the cultural contexts of hutongs and alleyways reflect remarkably different social constructs. On the one hand, Chinese hutongs are actively used as pedestrian zones and commercial frontages that intermingle public-private and interior-urban activities. On the other hand, American alleyways are often overlooked and used as singularly back-of-house service zones. While hutongs and alleyways function in different ways across cultures, they share similar spatial hierarchies and social agencies.

From its conception, this studio embraced Jane Rendell’s call for critical spatial practices (Rendell, 2010). It mobilised the interdisciplinary perspectives of architecture, urban design, interiors, and historic preservation to confront transnational socio-spatial issues in the built environment. Operating in comparative global contexts, students and faculty embraced trans-territorial design thinking, research, and making to promote diversity, social justice, and sustainability. The forum supported a cross-pollination of design practices to enhance students’ understandings of how inclusive design actions can achieve global impact. Students at the University of Kentucky in the United States connected with globally prominent collaborators in China to learn from Eastern culture and inform Western design practices.

At the same time, the studio leveraged the unfamiliarity of the Beijing hutongs to rethink design potentialities within an urban neighbourhood of a similar scale in Cincinnati. This act of transference allowed students to see design solutions beyond their own cultural bias and to gain international competency in design. Built environments in China and the United States informed geographic analysis (place), a collaborative teaching methodology (pedagogy), and an interdisciplinary team-based investigation (people). Integral to its methodology, students documented and analysed urban conditions by speculating on spatial opportunities at the interior scale. A series of multimodal exercises challenged the initial, and often intuitive, assumptions surrounding design. Students tested those ideas through art-based analysis using techniques of collage. Experimental forms of design communication using digital fabrication were employed to visualise the social, political, and environmental issues of each city.
A [Critical] Process

The spatial conditions of urban streets, buildings, landscapes, and interiors are inherently layered. Beginning with Beijing in the Yu'er and Baitasi hutongs, students worked iteratively to perform multi-perspectival readings of urbanism and the social structure of hutongs. Research initially focused on three aspects of the Beijing hutongs: thickened thresholds between discrete territories, spaces of socio-economic difference, and marks of hidden social systems. The same parameters were used in the historic Doerr, Ira, Weaver, and Baldwin alleys of downtown Cincinnati. Together, these socio-spatial conditions were compared to identify opportunities for cross-cultural speculation vis-à-vis informality, publicness, urban interiority, and participatory design. The comparison of transnational contexts didactically connected students to issues of culture and identity.

In any city, a corresponding set of mental images exists in the minds of those who experience it on a daily basis (Lynch, 1960). Working in nine teams, students collectively identified environmental conditions common to both cities. Inspired by Kevin Lynch’s seminal *The Image of the City* (1960), each team selected an environmental taxonomy—infrastructures, landscapes, networks, territories, places, thresholds, edges, influences, textures—to study its specificity within each context. These lenses encouraged a critical reappraisal of contemporary approaches to urban planning and design, as well as the role of the architect-planner-designer in a context (Rowe & Koetter, 1979).
Working in the manner of Rowe and Koetter (1979), students challenged utopian visions of “total planning” and “total design” to propose a “collage city” that can nurture a diverse range of heterotopias (p. 48). The design process included four forms of design analysis—collages, assemblages, diagrams, and narratives—that were used to generate foundational knowledge of the history, visual culture, and organisation of comparative metropolitan conditions. Beijing was studied at the urban scale of the Forbidden City and interior scale of hutongs, while Cincinnati was examined at the urban scale of its central core and interior scale of downtown alleyways.

The process of collage was used to engage abstraction and comparison of complex conditions. This initial exercise highlighted layering in the built environments of Beijing and Cincinnati. Students were asked to investigate spatial ideas through the digital manipulation of geometry, composition, colour, light, and materiality. Furthermore, the collage medium leveraged a conceptual process with interdisciplinary relevance to urban design, architecture, interiors, and historic preservation. Individual operative terms—contrast, pattern, and juxtaposition—were used as provocations to identify and visually represent specific conditions of a given taxonomy.

The art practice of assemblage was used to explore how two-dimensional studies may be transformed into three-dimensional forms. The process allowed students to enhance their understandings of Beijing and Cincinnati while enabling them
to explore contextual forms with far greater freedom through abstraction. The medium offered a platform to materially analyse the metropolitan (urban-architectural-interior) contexts of Beijing and Cincinnati through architectonic principles of layering, framing, revealing, concealing, and juxtaposition. The practice of choosing, editing, and formatting information via physical media enabled opportunities for composition and curation to emerge. Students employed a single operational word—juxtaposition, scale, and contrast—to each assemblage, and selected films thematically set in each city to integrate cinematic representational techniques.

Diagrams and narratives were used as a documentation device to survey a diverse range of spatial territories—interior and exterior—through various art-based means. Diagrams were employed to study hierarchies, flows, and densities, while written narratives expressed urban phenomena to operationalise each taxonomy. Together, these exercises allowed students to develop an impactful project, to preserve and leverage history, and to promote strategies for improving quality of life.

A [Critical] Translation

After visiting the hutongs, the studio convened in the Beijing offices of Urbanus. The group discussed the character-defining aspects of the hutongs. These attributes were identified as bounded precincts, spatial hierarchies, framed public spaces, prominent thresholds, interstitial zones, material complexities, and social networks. Field research within the hutongs included photographic documentation, site measuring, and interaction with residents. These endeavours revealed social conditions, including multi-generational families, ageing-in-place, illiteracy, food scarcity, and
knowledge exchange. Parallel field research in our home base of Cincinnati provided a comparative North American lens in a familiar context. Upon returning to the United States, students engaged our local context to rethink spatial potentialities and character-defining conditions of downtown alleyways in Cincinnati through a Beijing lens. In Cincinnati, place-specific attributes were identified as fire escapes, balconies, overhangs, stairways, rooftop gardens, bricked-in openings, lack of natural light, and textural changes. Residents have appropriated these surfaces with their own personal effects to temporarily transform adjacent exterior spaces for various needs ranging from food preparation to home industries.

After completing their field research in Beijing and Cincinnati, students developed design proposals that could serve as catalysts for community regeneration in sites preselected by their professors and local design professionals. Students interacted informally with neighbourhood stakeholders and applied these insights to their design process. Faculty members challenged students to respond to their pre- and post-travel observations, and to develop a language of the place that could define a conceptual approach.
Field research in both cities informed and contextualised a program for urban infill social housing dwellings (accessory dwelling units) conceived for sites in the Beijing hutongs and Cincinnati alleyways. Social and spatial lessons gleaned from the process studies were applied to the design of affordable, adaptive, and deployable housing. Students collectively identified strategies that could promote historic preservation and revitalisation, while developing frameworks for entrepreneurial activity. They applied their taxonomic research of collages, material studies, and urban diagrams to shape their design ideas. For instance, urban diagrams informed decisions at the site and architectural scale, while collages and material studies were applied to landscape and interior conditions. Project ideas across the studio were sorted into three general categories of tabula rasa, seamless integration, and adaptive reuse. Students developed projects that addressed historic preservation at urban, architectural, and interior scales with visualisations that narrated theoretical concepts working through critical spatial practices. This learning was presented in a final exhibition focused on transcultural forms of interior urbanism and potential design responses for Beijing and Cincinnati.

Figure 5
Beijing hutong intervention, new courtyard housing
(Images by Jillian Deneroff, Mitchell Archer, Natalie Carson, Chaysen Smith, Meagan Whalen, Hannah Thomas, Megan Murray)
Figure 6
Beijing hutong intervention, new courtyard housing
(Image by Jillian Deneroff, Mitchell Archer, Natalie Carson, Chaysen Smith, Meagan Whalen, Hannah Thomas, Megan Murray)

Figure 7
Beijing hutong intervention, new courtyard housing
(Image by Abigail Camfield, Caela Mone, Emma Donelon, Stephen DeNeui)
Conclusion

This studio developed a pedagogical model for students in urbanism, architecture, interiors, and historic preservation working together on trans-scalar intercultural field research. It sought to leverage the knowledge of a local interior urban spatial condition—the Cincinnati alleyway—through a new awareness of a similar urban spatial type in Beijing—the hutong. Through the analysis of contrasting urban histories, students learned how various spatial typologies share fundamental characteristics. As an interdisciplinary endeavour, the studio produced research and final projects demonstrated that preservation and interiority operate cross-culturally within urbanism, architecture, and landscapes. As an international experience, it allowed American students to translate Chinese precedents to speculative design interventions through critical spatial practices. The long-range goal of this project is to serve the United Nations Sustainable Development Solutions Network (UN-SDSN) as an interdisciplinary design practice exemplar.
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