

A Framework for Ordinary Urban Heritage Mapmaking: The Case of Trok in Rattanakosin, Bangkok's Historic Center

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ABSTRACT

This research offers an alternative mapmaking framework for Ordinary Urban Heritage (OUH), specifically applied to the *Trok* (local alleys) of Bangkok's Rattanakosin district. Departing from conventional approaches that might map *Trok* solely as pedestrian urban patterns, this framework uniquely explores *Trok* as dynamic urban spaces that enable the manifestation of diverse everyday heritages, including temporary commercial activities, people's way of living, and sacred spaces, thereby revealing a richer understanding of OUH. The framework's development is grounded in the analysis of existing mapping practices, historical maps, and non-participatory surveys, incorporating five key OUH selection criteria sensitive to these dynamic manifestations: (1) time duration, (2) ordinary people's heritage, (3) everyday heritage cluster formation, (4) heritage adaptation from the urban context, and (5) the existence of heritage in the present day. By integrating qualitative and quantitative approaches and employing thematic, pictorial, and statistical maps, the research demonstrates the potential to represent these multifaceted characteristics of OUH within *Trok*. Furthermore, the introduction of virtual and digital maps is crucial for capturing the temporal and spatial fluidity of these everyday heritages as they unfold within the *Trok*. Ultimately, this research contributes an alternative perspective to cultural mapping by providing a framework that moves beyond static representations of urban form to capture the dynamic and context-specific ways in which ordinary urban spaces like *Trok* become the stage for the continuous enactment of everyday heritages.

Keywords: ordinary urban heritage (OUH), context-specific mapmaking framework, cultural mapping, Trok, Rattanakosin's dynamic urban space

INTRODUCTION

A map is a graphic representation of the cultural and physical environment (Ingram, 2020). Mapping is particularly instrumental in the construing and constructing of lived space (Corner, 2011).

This paper discusses a mapmaking framework relating to Ordinary Urban Heritage (OUH) through the case of *Trok*, a small local alley accommodating everyday activities. OUH is an alternative approach to cultural heritage that values the heritage of ordinary people in their daily lives (Jhearmaneechotechai et al., 2023). The OUH mapmaking framework explores how maps can reflect everyday urban life. It extends the concept of cultural mapping by integrating Ordinary Urban Heritage (OUH) as a key component. This framework provides a structured approach to mapmaking that highlights the ordinariness and everydayness found in urban spaces. The resulting maps can serve as a foundational database for identifying and planning the conservation of these ordinary yet valuable urban heritages. While national and official heritage sites, such as monuments, palaces, and temples, often get significant attention and conservation efforts, ordinary and everyday heritage sites as OUH, in contrast, are frequently overlooked and undervalued. OUH designation has five key selection criteria: (1) time duration; that the OUH must inherit from a generation to the next generation, (2) ordinary people's heritage; the OUH has been invented, developed and used by the ordinary people, not by elites or government, (3) everyday heritage cluster formation; the OUH is a cluster of heritage of everyday life, not a stand-alone heritage, (4) heritage adaptation from the urban context; the OUH accepts the transformation and adaptation to the heritages from the urban context as a part of heritage making, and (5) the existence of heritage in the present day; the OUH must continuously present itself in the present day from the past.

While the historic center of Bangkok boasts renowned heritage sites like the Grand Palace and temples, the everyday heritage of local communities, such as that found in *Trok*, has often been marginalized and overlooked (Imai, 2017; Paksukcharern, 2007; Sennett, 1971). Despite efforts to conserve the city's heritage,

there remains a gap in understanding and valuing the local heritage (Peerapun et al., 2020, as cited in Issarathumnoon, 2022). A lack of awareness or understanding of the heritage can lead to the neglect or destruction of valuable cultural resources (Wan Shamsuddin et al., 2022, as cited in Madhury & Sarker, 2024).

Trok in Rattanakosin were chosen to be investigated as a framework of OUH mapmaking by the above mentioned five criteria, specifically because: (1) as a fundamental urban element and ubiquitous urban morphology of narrow passageways in Rattanakosin, *Trok* thoroughly coexist with the urban evolution of Rattanakosin before 1896 (Figure 2); (2) they were built and used by ordinary residents to access their houses in the urban blocks; (3) *Trok* not only form the walking network within the blocks but also are clusters of supporting everyday activities, both commercial and residential activities such as restaurants, shops, markets, storage areas, and meeting areas; (4) *Trok* have been adapted to the contemporary urban context of tourism and business in Rattanakosin; and (5) *Trok* exist in the present day with the characteristics of living neighborhoods.

This paper then presents the process of developing a mapmaking framework that can effectively capture the unique characteristics of an OUH that manifests with everyday activities and times through the case of *Trok*. The process of mapmaking framework is explored through two questions: (1) Considering the literature reviews and the five selection criteria of OUH through the case of *Trok*, what makes OUH mapmaking theoretically different from conventional cultural mapping?; and (2) for a mapmaking framework of OUH through the case of *Trok*, what must be considered in a mapmaking framework to represent the dynamic urban space of *Trok* on a map?

Since the map of *Trok* in Rattanakosin has never been studied as an ordinary urban heritage, a framework of OUH mapmaking through a case of *Trok* can contribute to the completeness of spatial data. This dataset can be a foundational resource for strategic planning and decision-making to create a more complete picture of urban planning and policy.

LITERATURE REVIEW

To establish the theoretical framework for OUH using the case of *Trok*, an analysis was conducted on reviews of related mapping and mapmaking to understand the connection between them. This framework also incorporates a review of OUH and its selection criteria.

Mapping

Mapping refers to all the processes of producing a map whether collecting data, performing the design of the map, or preparing the map for distribution in hardcopy or web; most often it is related to geography, and early attempts at mapping focused more on art than on scientific (Fuechsel, 2023; Monmonier, 1977).

Cultural Mapping

Cultural mapping is a systematic approach to recording and presenting information that provides an integrated picture of a place's cultural character, significance, and workings. Cultural mapping is illustrated through cultural connections that can be identified on maps to reveal the historical and cultural links between people in their original lands and make culture more visible (Pillai, 2020). Cultural Mapping is widely used as a planning and development tool by different levels of government and non-governmental organizations. It has become increasingly popular with municipal and cultural administrators (Greg, 2003).

Cultural Mapping is both a process and a product. It can collect, record, analyze, and synthesize data to describe cultural resources, networks, links, connections, and usage patterns of a given community or group (Crawhall, 2010; Stewart et al., 2010)

As a tool for identifying Cultural Heritage in an area, Cultural Mapping has 5 main mapping trajectories (Crawhall, 2010; Duxbury et al., 2015) (1) Community empowerment creates a community empowerment map by cooperating within the community; (2) Counter-mapping is used to counter community participation in the mapping process for making maps of communities; (3) Cultural policy and municipal

governance support the proposal of government policies and a mapping process; (4) Artistic approach is an artistic practice and represents the self-knowledge promotion of community and sustainable development; and (5) Academic inquiry and the mapmaking approach created the spatial turn to influence the area of original academic work with its cultural nature and embeddedness of maps (Figure 1, A1.1).

The scale of mapping refers to the immediate geographical parameters, boundaries, or limits of the mapping. In contrast, the scope of mapping refers to the general areas and the detailed features to be covered by the mapping in which the scale and scope of cultural mapping can be determined. It can be divided into 3 levels: (1) Intimate Scale is the degree of the perimeter of the study area in single building scale mapping and immediate compound; (2) Intermediate Scale is a mapping of a site, and (3) Regional Scale is a larger cultural landscape mapping or region surrounding the site (Pillai, 2020) (Figure 1, A1.2).

Cultural Mapping in Thailand

Cultural mapping has been done in many cities to represent the cultural heritage through the Cultural Heritage Atlas and maps such as, "Cultural Heritage Atlas of Amphawa Community in Samut Songkhram Province" (Peerapan, 2005), "Cultural Heritage Atlas of Tub-Tieng in Trang Province" (Khwanuwun, 2005), "Architectural Atlas-Cultural Heritage in Nakhon Sawan Province" (Art Culture, Nakhonsawan Rajabhat University [NSRU], 2006), "Cultural Heritage Atlas in Nakhon Lampang Province" (Office of Natural Resources and Environmental Policy and Planning [ONEP], 2006), "A Study for Maneuver of Architectural Heritage Atlas of Rak Klong Bangpra Community in Trad Province" (Towinus, 2011), "Cultural Heritage Maps of Mae Chaem District in Chiang Mai Province" (Chansuebsri et al., 2015), "The Project to Construct a Cultural Heritage Map with Participation from the Community of Nong Khu Khad Sub-District in Mahasarakham Province" (Sangvatanachai et al., 2017), and "Cultural Heritage Atlas Vernacular Architecture at Tha Mai Communities in Chanthaburi Province" (Perapatanakul, 2021). The old districts of Bangkok were also represented in the Cultural

Heritage Atlas of Rattanakosin" (Jaruwannapong, 2004) and "The Study of Architectural Identity in Correlation with Urban Heritage Area: the Case of Yaowaraj Road" (Sanguansintukul & Ardruga, 2018). These works were done to respond to the cultural policy and the academic purpose of representing the tangible heritages in the intimate scale of the local architecture, the religious places, and the intermediate scale of a community or a district. Some reviews relating to the urban streets and alleys with cultural mapping examples have been done in Bangkok. These works focused on physical urban elements, their contexts, and locations of the tangible heritage. Other examples include "The Cultural Heritage Atlas of Rattanakosin" (Jaruwannapong, 2004), "Mapping the Lived Experiences of Bangkok's Sois" (Boontharm, 2016), "Preserving Alleyways to Increase Walkability of Historical Japanese Cities" (Yoshii, 2016), and "The Back Alley Project @ Kowloon East" (Energizing Kowloon East Office [EKEO], 2021).

Digital Mapping

Digital mapping is performed through some kind of digital interface, typically a computer system with a Graphical User Interface (GUI). Whilst GUIs have been available for some time, it is worth stressing that image interpretation requires a graphical display, and the greater the size and number of pertinent displays, the easier interpretation potentially becomes. It is also essential for all work to be performed within a Geographical Information System (GIS) to ensure that input imagery and interpreted data sets maintain the same geographical coordinate system. This allows data export into other geographic products and facilitates accurate map production and quantitative analyses (Lillesand et al., 2008; Longley et al., 2005; Mather & Koch, 2004). Although the outputs of digital mapping are commonly used within cartographic products (Otto et al., 2011; Smith, 2011) (Figure 1, A2).

Digital mapping concerns the development of a digital platform based on geographical data systems. The digital mapping may offer an integrated platform for the recording and use of the data of the area. In that way, the open data can yield multiple benefits at the level of

management, research, economy, etc. (Psychogyios & Maistrou, 2019).

Related work has demonstrated how digital cultural heritage transforms the way of experiencing or learning community heritage through social media. The community is becoming more and more involved through distributed curation where technologies mediate and allow them to contribute to history and personalization, and where communities' online activities are used to help in decision-making. Current social platforms have demonstrated their potential to build networks through the individual and distributed contributions of users. To our knowledge, however, their possibilities have not been fully exploited with regard to cultural heritage promotion and integration in people's everyday life (Lim et al., 2018).

An intelligent digital mapping system can integrate GPS with total station instruments. The digital mapping system can acquire, input, edit, map, output, and manage the spatial data of the site terrain and can effectively improve the archaeological mapping accuracy and efficiency. The process of digital mapping data mainly includes data transmission, data preprocessing, data transformation, data computing, graphics generating, image editing, management, and the application of graphical information. Data preprocessing includes coordinate transformation, various data matching, unification of map scales, and data conversions. Data processing can generate digital map files to exchange information with external devices. The control of map layers can compile and output various thematic maps including plane graphs, topographic maps, maps of site distributions, etc. (Zhou et al., 2012).

Mapmaking

A map is a graphic representation of the cultural and physical environment. All maps are visual representations of the phenomenon to be modeled, selective, symbolic, and shrinking (Ingram, 2020). The map is drawn to scale and usually on a flat surface featuring a geographical context that area simulates and explains the relationship between elements within the map, such as objects or sub-areas (Dent et al., 2009; Fuechsel, 2023). The concept of scientific

materialism is a guideline that makes cartographers and most modern artists become more aware of the potential and the role of the map as a tool to reference, interpret, and innovate the world (Corner, 2011). The reviews of maps in this paper have been grouped into components: (1) purpose, (2) representation and (3) medium.

Map Purpose

There are 3 main formats according to the purpose of use (Wood & Fels, 1993). Firstly, a general purpose map, or base map, or reference map (Figure 1, B1.1), is a map showing the location of objects from both natural characteristics and man-made representing both the spatial characteristics of social and scientific data such as climate, flora, geology, population, and trade. This is suitable for public use (Dent et al., 2009; Penn State, 2018).

Secondly, a thematic map (Figure 1, B1.2) is a specific or statistical map that emphasizes features, information, or concepts. It can be divided into 2 subtypes: qualitative thematic map (Figure 1, B1.2A) and quantitative thematic map (Figure 1, B1.2B). They can show the spatial boundaries of data by category, spatial distribution, or location of a single theme of data (Dent et al., 2009). Thematic maps can show spatial patterns of numerical and statistical data such as numbers, incomes, ages, and population (Penn State, 2018).

In addition, thematic maps can be categorized according to 5 different appropriate data presentation styles (Ingram, 2020). (1) A dot density map is used to display a certain amount of numerical information through each point on the map (Figure 1, B1.2B-1). (2) A choropleth map uses color to present information through color shading with varying intensity (Figure 1, B1.2B-2). (3) A proportional symbol map assigns different symbols according to height, length, area, or volume in each location (Figure 1, B1.2B-3). (4) A flow map uses linear symbols to show movement from one point to another (Figure 1, B1.2B-4). (5) A cartogram map uses symbols or colors to convey information (Figure 1, B1.2B-5).

The last format is a cartometric map (Figure 1, B1.3), which is a special map designed for

precise measurements. Cartometric analysis refers to performing mathematical operations such as counting, measuring, or estimating. It is optimized for high-precision purposes such as an Aviation Navigation Chart or topographic maps that requires distance calculations (Dent et al., 2009; Jon Kimerling et al., 2016)

Map Representation

At present, various maps have been developed and subdivided into several types. In addition to the basic design principles, the presentation or categorization of maps is still limited and ambiguous, and also map representations are nowadays more and more explored (Christophe, 2012). The map is categorized into 3 types according to the representation style.

Firstly, a pictorial map (Figure 1, B2.1) is a genre of map that helps to bring details on a map to life by using illustrations to convey information about geographic locations, such as landmarks, buildings, people, ethnicities, flora, and fauna (Hopkins et al., 1999). These maps are usually characterized by humorous, playful, or whimsical touches. Although the maps are pictorial, they often include textual explanations of the illustrations. Because they contain illustrations in the maps, they are usually very decorative, also serving the purpose of promoting tourism, commemorating historical milestones, and some annual events (Glazer & Glazer, 2019). With more formats on platforms or digital media at the same time, it also presents in a variety of visual formats, including sketches, drawings, illustrations, as well as 3D images that help present each type of information clearly and appropriately. Most of them are image presentations in the form of graphical maps and few in statistical maps (Naz, 2005).

Secondly, statistical maps (Figure 1, B2.2) are used to show the difference in values between different geographical regions in geospatial analysis. They could be used to illustrate geographical variations of certain events such as the differences in the prevalence of events, and benefit-risk. The use of statistical maps can be found in everyday life such as warnings and weather forecasts (Pharmacoepidemiological Research on Outcomes of Therapeutics by a European Consortium [PROTECT]). Visualization of geographical data requires a statistical

understanding of mapping. The spatial and physical display of the data is not always useful, and statistical maps cannot always tell the exact location; this can lead to misinterpretation of the map. The design of the map is therefore important in showing quantitative data. Designing and presenting statistical maps from quantitative data and qualitative data should work together with presentation elements such as points, lines, planes, and visual variables to achieve the specificity of cartographic symbolization in the construction of standard mapping methods (Buckley, 2012). A statistical map aims to match the right data with the most effective method. so, readers can easily, quickly, and accurately interpret the map (Brewer, 2006). Sometimes maps are not always good at representing statistical data (Buckley, 2012)

Lastly, a dynamic map (Figure 1, B2.3) is a mapping concept used to describe dynamic spatial phenomena or to present spatial information dynamically. Dynamic maps can support real-time data source changes and are useful for their ability to visualize complex spatial data because it is easier to read and less crowded due to the ability to switch specific data views on and off the map (Goodmaps, 2022).

Map Medium

Currently, map classification by map medium can be classified into 3 types (Jeffrey, 2016), (1) A tangible map medium (Figure 1, B3.1) is a hand-held map, with the most common medium being paper. Paper has many advantages as a medium, such as ease of transport, low cost of production, and no requirement for specialized hardware or software to view. The disadvantages of paper maps are that they are not easily updatable, cannot show dynamic content, and are set at a single scale (Ingram, 2020). (2) A virtual map, or digital map medium (Figure 1, B3.2), is any map displayed on electronic tools. It is featured in changes and updates, and it is easy to provide up-to-date information. It can also be linked to many databases. Various categories such as documents, images, animations, and sounds, are easily accessible to everyone. However, some limitations require specific tools to access either hardware or software (Ingram, 2020; Jeffrey, 2016). (3) A mental map medium (Figure 1, B3.3) is a map

that is stored in someone's mind and is their conceptualization of space (Ingram, 2020).

In daily travel activities, the use of digital maps not only lets us organize our movements, but they are also one of the first tools through which we become aware of a place. In this sense, when the reference is to cultural heritage sites, digital maps have a key role in collecting and sharing knowledge. In addition to that, working through a cartographic base, this type of implement allows easier integration with the existing documents and resources of urban planning, enabling to outlining of all the initiatives, whether they are architectural projects or not, necessary to allow inclusion to lead the transformation processes of the city. In recent years, the success of digital maps has been widely recognized. These types of services, such as Google Maps, Bing Maps, Yelp, and Waze, have contributed to the spread of an increasing number of information, although the data regarding the physical accessibility of the built environment are extremely poor (Marconcini, 2018).

Interactive Digital Map

This type of mapmaking was designed from the start to become a key tool for archaeological heritage integrated management facing the increased pressure from contemporary society, whose economic and real estate development needs are often at odds with the protection and conservation activity of the archaeological heritage. The information should then be made available in an easily accessible form to both the institutions involved in the management and protection of the archaeological heritage and the public, so that this non-renewable resource can be included in local sustainable development projects (Marian et al., 2022). Despite the diversity of presentation methods available for location-based information and their different strengths and weaknesses, a limited number of studies have been conducted to compare between them, a comparison between a digital map interface with a physical map that includes AR features that superimposes content on the camera view. Findings suggested that the latter had a better performance. While AR interfaces have been developed and used over a number of years, it is only with the recent advent of well-equipped smartphones that they have now seen greater utilization. Qualitative observations

however suggest that the AR interface seem to encourage group discussion and public problem-solving. In summary, evaluations for presenting location-based information tend to focus on one or at most two interface types (e.g. maps alone, or maps and AR) (Goh et al., 2011).

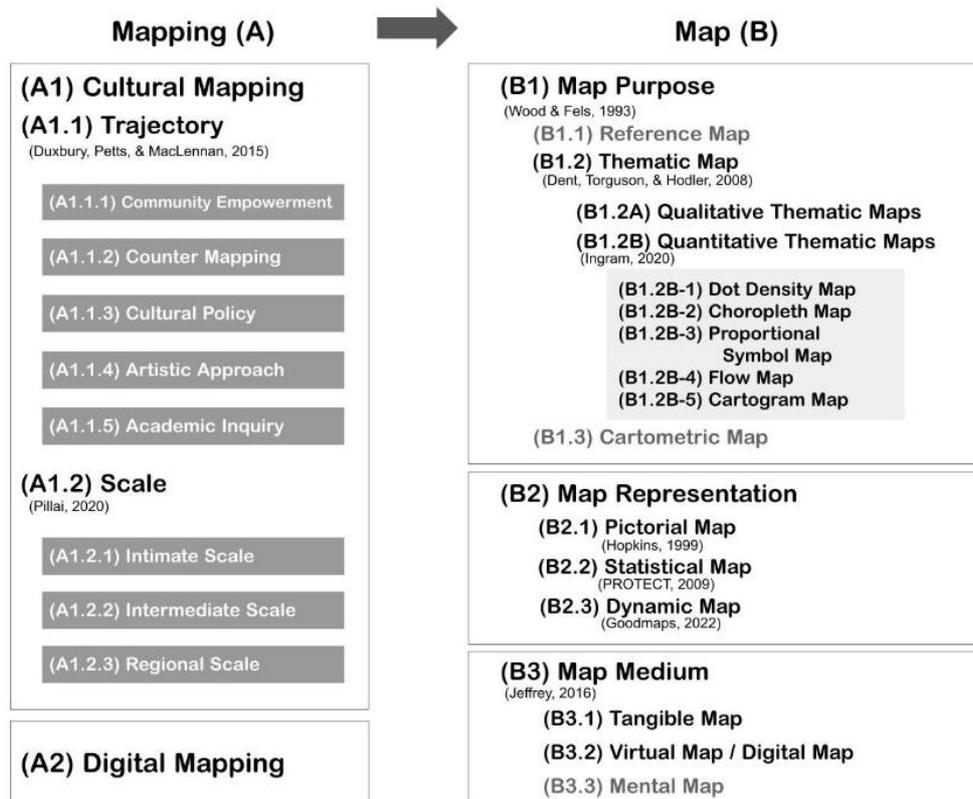
Ordinary Urban Heritage and the Selection Criteria

Ordinary Urban Heritage (OUH) is theorized through three heritage approaches: vernacular heritage, urban heritage, and ordinary heritage. These approaches suggest that ordinary urban heritage is a manifestation of non-elitism, commonness, spiritual significance, local relevance, and connections to everyday life.

Vernacular heritage focuses on heritage created by locals using traditional expertise passed down through generations. This heritage is part of daily practice and is not entirely static; instead, it is subject to modifications and transformations to adapt to present-day requirements. Meanwhile, urban heritage reflects the notion of vernacular traditions and their continuation in the urban context, weathering changes and embracing the contemporaneity of heritage. Finally, the ordinary heritage approach is more people-centered than object-centered. It seeks to understand the cultural heritage produced by the daily activities of ordinary people, also known as "unofficial heritage." This type of heritage has often been overlooked in conservation lists and practices, leading to the risk of endangering communities and their heritage (Jhearmaneechotechai et al, 2023).

Figure 1

Summary of Existing Typology of Mapping and Map



Note. Summary of the existing typology of mapping and maps by Jhearmaneechotechai P. (2025). Adapted from *Khronkhan wichai choeng patibatkan ok baep phua sangkhom - saha sat phua phatthana ongkhwamru dan kan okbaep lae chattham phaenthi moradok muang saman khong krung Rattanakosin* [Social Design Action Research Project - Multidisciplinary Knowledge Development for Design Practice and Ordinary Urban Heritage Mapping in Historic Rattanakosin Area], by P. Jhearmaneechotechai, P. Povatong, C. Fusinpaiboon & P. Chatakul, P., 2023.

An OUH was selected from existing heritages in Rattanakosin using five selection criteria. To formulate the OUH mapmaking framework, an analysis of *Trok* was conducted to create the framework for OUH mapmaking in Rattanakosin, as follows: (1) Time duration; the heritage must have existed for at least 50 years or been transmitted intergenerationally. This criterion considers the heritage's longevity and its transmission across generations. *Trok* were first documented on maps older than 1974. (2) Ordinary people's heritage; this criterion focuses on heritage created and used by ordinary people. *Trok*, created by local residents for access to their homes, exemplify this. (3) Everyday heritage cluster formation; this criterion highlights the frequent occurrence of heritage elements in public spaces. The repetitive pattern of *Trok* walkways across Rattanakosin illustrates this. (4) Heritage adaptation from urban context; heritage can adapt to urban changes. *Trok* have evolved into urban passages and spaces for activities like eating, reflecting changing lifestyles. (5) Existence of heritage in the present day; heritage must continue to exist and be used today. The ongoing use of *Trok* for daily activities demonstrates their enduring significance.

RESEARCH METHOD

Following a review of the mapping and mapmaking processes and the Ordinary Urban Heritage (OUH) with its selection criteria, a historical map analysis and the field surveys were undertaken to develop an OUH mapmaking framework.

The Historical Map Analysis: A diachronic analysis of historical maps from 1887, 1896, 1907, 1910, 1932, 1974, and 2020 was conducted to trace the morphological evolution of *Trok*. Examining changes in spatial patterns, connectivity, and land use provided insights into the historical development of these urban spaces. The analysis was informed by theories of urban form and historical geography. The Non-Participatory Field Survey: A series of non-participatory foot surveys were conducted in 2020-2022 to document the contemporary state of *Trok*. Data was collected on various aspects,

including the physical characteristics of *Trok*, their spatial relationships, and their role in the daily lives of local communities.

Trok in Historical Maps Analysis

Cities often express their identity and culture through their street networks (Choudhury, 2021). Streets, as public spaces, are significant cultural heritage, reflecting a place's historical essence and fostering a sense of community belonging. *Trok* emerged as a network of narrow alleyways connecting main roads to mixed-use areas within urban blocks. This network facilitated pedestrian movement within the urban fabric of Rattanakosin (Jhearmaneechotechai, 2022). *Trok* serve as an important public space, closely intertwined with the daily lives of residents (Surinta, 2023).

In Rattanakosin, *Trok* also connect canals to communities, often bypassing traditional property boundaries. These narrow, enclosed spaces, while limited in visibility and accessibility, form an interconnected network (Imai, 2017).

RESULT

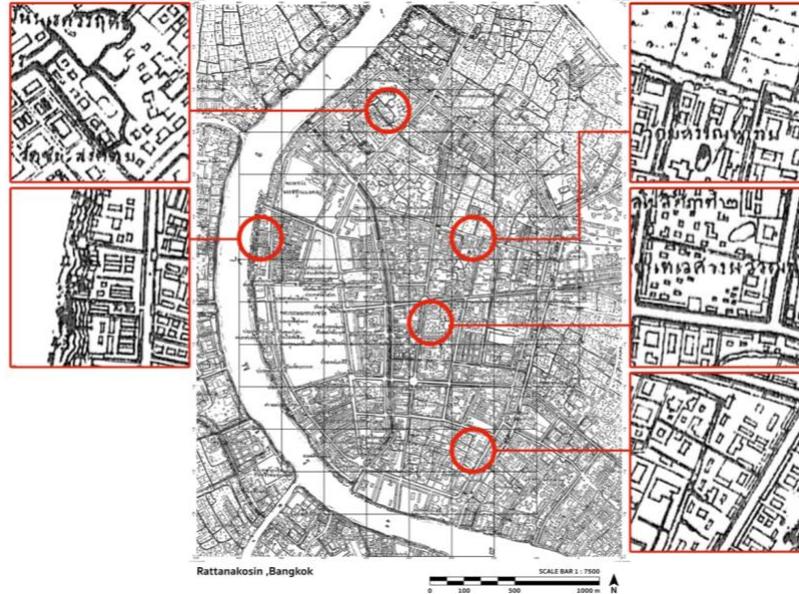
From the 1896 map of Rattanakosin, *Trok* were found as the thin lines connecting the roads to the houses in the urban blocks (Figure 2: red circles)

An analysis of historical maps from 1887, 1907, 1932, and 1974 (Figure 3) reveals the evolution of *Trok*. Initially, *Trok* were concentrated along canals in the central part of Rattanakosin (black and dark red lines). Over time, they expanded to the city's perimeter and surrounding areas. By the 1970s, *Trok* were particularly prominent around markets and major roads.

The 1974 map was used as a baseline to identify *Trok* which existed for more than 50 years. These *Trok* are embedded within local communities, forming a network of walking paths across Rattanakosin. Additionally, *Trok* can be found in communities along the Chao Phraya River, where they connect to parallel roads (Figure 4).

Figure 2

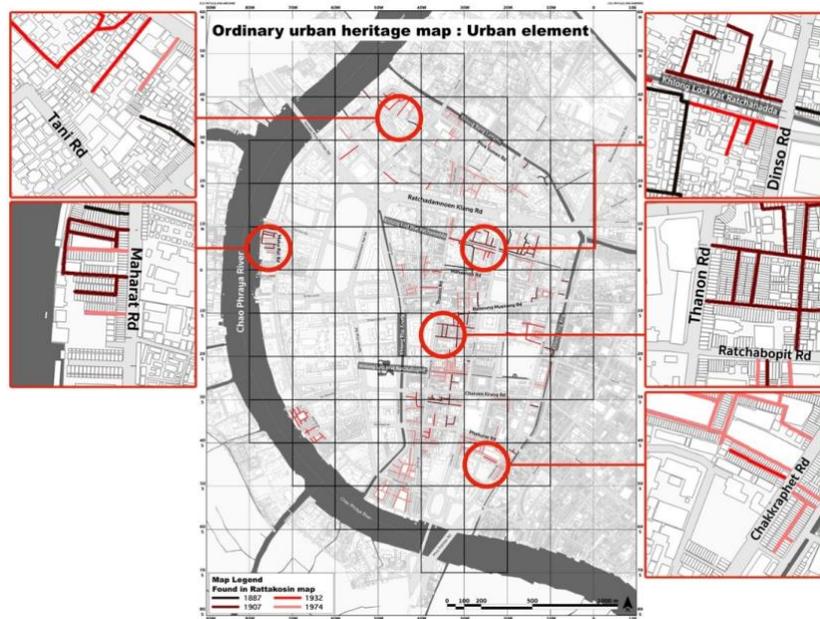
Map of Rattanakosin in 1896, the Pattern of Trok in the Urban Blocks



Note. Adapted from *Map of Rattanakosin in 1896*, by Royal Thai Survey Department and Historical Maps and Documents on Urban and Architectural Research Unit, Faculty of Architecture, Chulalongkorn University. Copyright by Royal Thai Survey Department and Historical Maps and Documents on Urban and Architectural Research Unit, Faculty of Architecture, Chulalongkorn University.

Figure 3

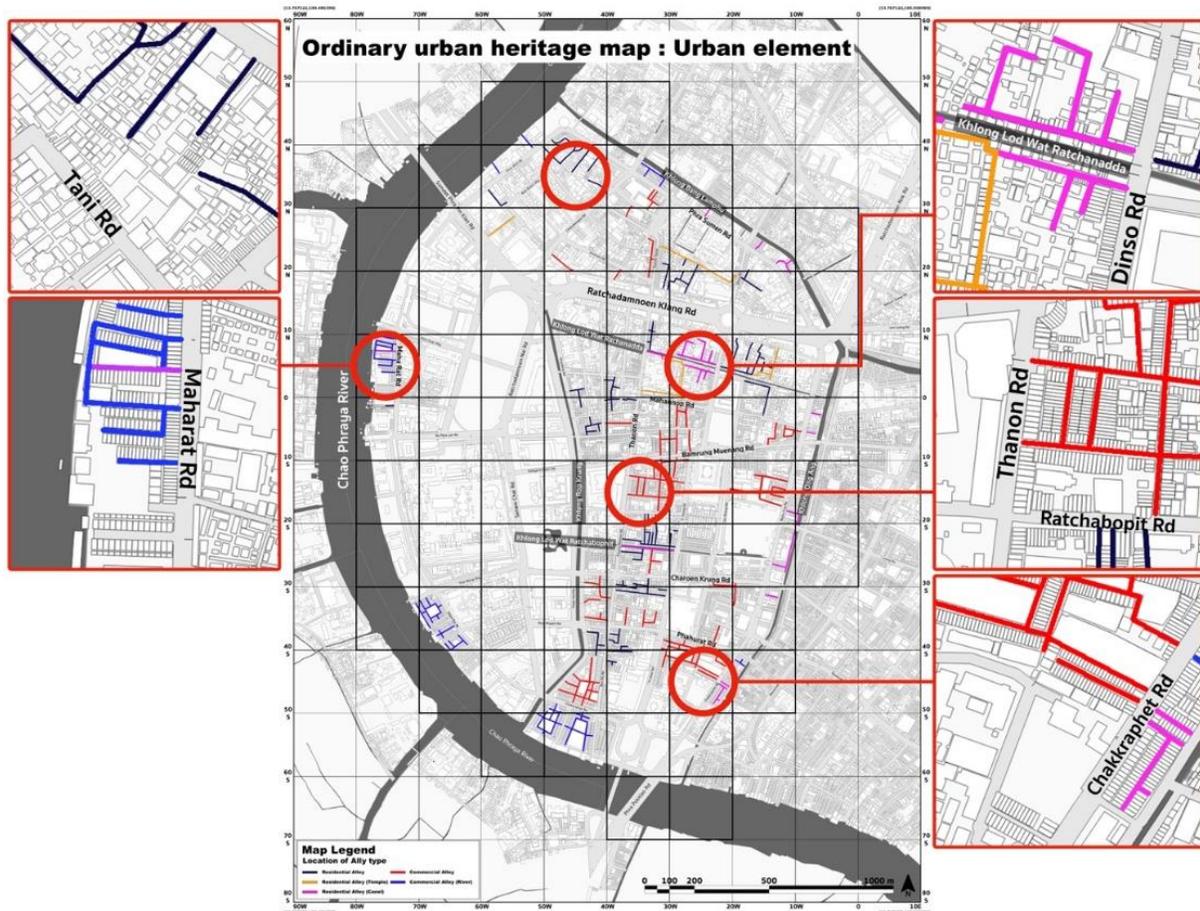
Appearance of Trok in the Historical Maps



Note. Adapted from *Bangkok Three-Dimensional Geographic Information System Map in 2013*, by Department of City Planning, Bangkok Metropolitan Administration.

Figure 4

Map of the Trok of Rattanakosin in Present-Day



Note. Adapted from *Khrongkan Wichai Phaenthi Moradok Muang Saman Krung Rattanakosin* [Ordinary Urban Heritage Map in Rattanakosin Area], by P. Jhearmaneechotechai, P. Povatong, C. Fusinpaiboon & P. Chatakul, 2023, Faculty of Architecture, Chulalongkorn University. Copyright 2023 by P. Jhearmaneechotechai, P. Povatong, C. Fusinpaiboon & P. Chatakul.

Non-Participatory Field Survey

Non-participatory field surveys were conducted by foot from 2020 to 2022 in Rattanakosin to verify the existence and current appearance of *Trok* as identified in the historical maps. The survey base map was generated from Bangkok's 2020 Geographic Information System (GIS) and divided into 75 grid cells of 250 meters by 250 meters (Figure 5, right).

The map employed the coordinate system of the 1907 Rattanakosin map, with the Golden

Mountain serving as the origin (0,0) (Figure 5, left, red circle). The Golden Mountain was a prominent landmark of Rattanakosin, constructed in 1865, replicating the model of the Golden Mountain in Ayutthaya, the previous capital of Siam.

The 1907 map coordinate system extended 80 units west, 50 units north, and 70 units south of the Golden Mountain (Figure 5, right, red circle). Specific examples of *Trok* were highlighted in more detail (Figure 5, red squares).

The *Trok* were analyzed based on the surveys and categorized into five types: (1) Residential *Trok*: These *Trok* connect roads to houses within residential blocks (Figure 5, red square part 6; Figure 6, red square part 6, dark blue line). They are commonly found in residential communities in Rattanakosin. (2) River-perpendicular *Trok*: These *Trok* connect commercial areas between the Chao Phraya River and roads (Figure 5, red square part 25; Figure 6, red square part 25, blue line). (3) Temple *Trok*: These *Trok* provide access to communities that rent land from temples (Figure 5, red square part 30; Figure 5, red square part

30, orange line). (4) Commercial *Trok*: These *Trok* connect commercial areas to roads (Figure 5, red square part 45; Figure 6, red square part 45, red line). (5) Canal-Side *Trok*: These *Trok* are located between canals and roads, often occupying the former site of city walls (Figure 5, red square part 68; Figure 6, red square part 68, pink line).

The five types of *Trok*, as illustrated in detailed maps and photographs (Figure 6, red squares), exhibit distinct characteristics and play various roles within the urban fabric of Rattanakosin.

Figure 5

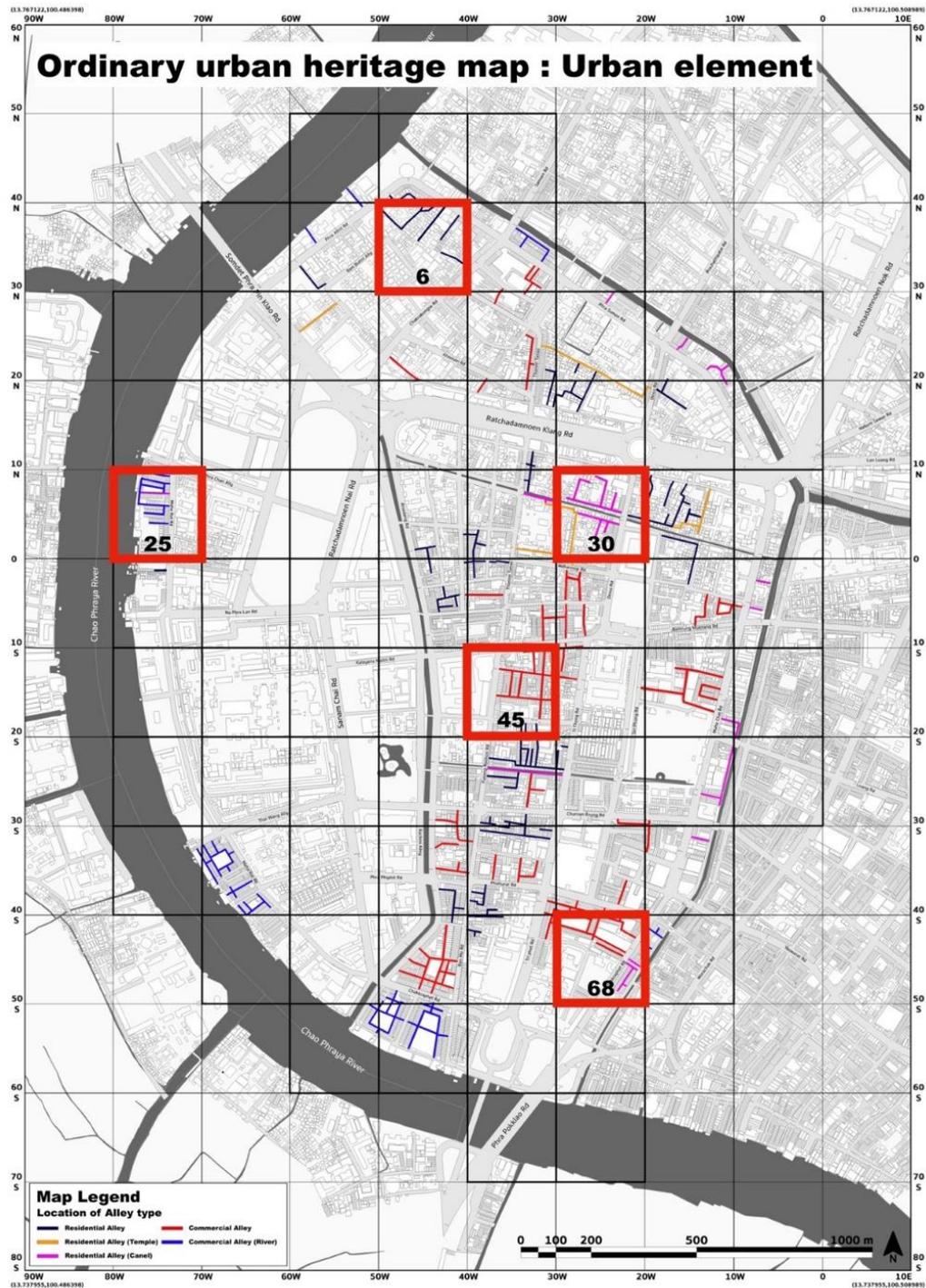
75 parts of Rattanakosin Map



Note. The coordinate system started at the Golden Mountain (0,0 red circle). (Left) Adapted from *Map of Rattanakosin in 1907*, by Royal Thai Survey Department and Historical maps and documents on Urban and Architectural Research Unit, Faculty of Architecture, Chulalongkorn University. Copyright by Royal Thai Survey Department and Historical maps and documents on Urban and Architectural Research Unit, Faculty of Architecture, Chulalongkorn University. (Right) Adapted from *Khronkan Wichai Phaenthi Moradok Muang Saman Krung Rattanakosin* [Ordinary Urban Heritage Map in Rattanakosin Area], by P. Jhearmaneechotechai, P. Povatong, C. Fusinpaiboon & P. Chatakul, 2023, Faculty of Architecture, Chulalongkorn University. Copyright 2023 by P. Jhearmaneechotechai, P. Povatong, C. Fusinpaiboon & P. Chatakul.

Figure 6

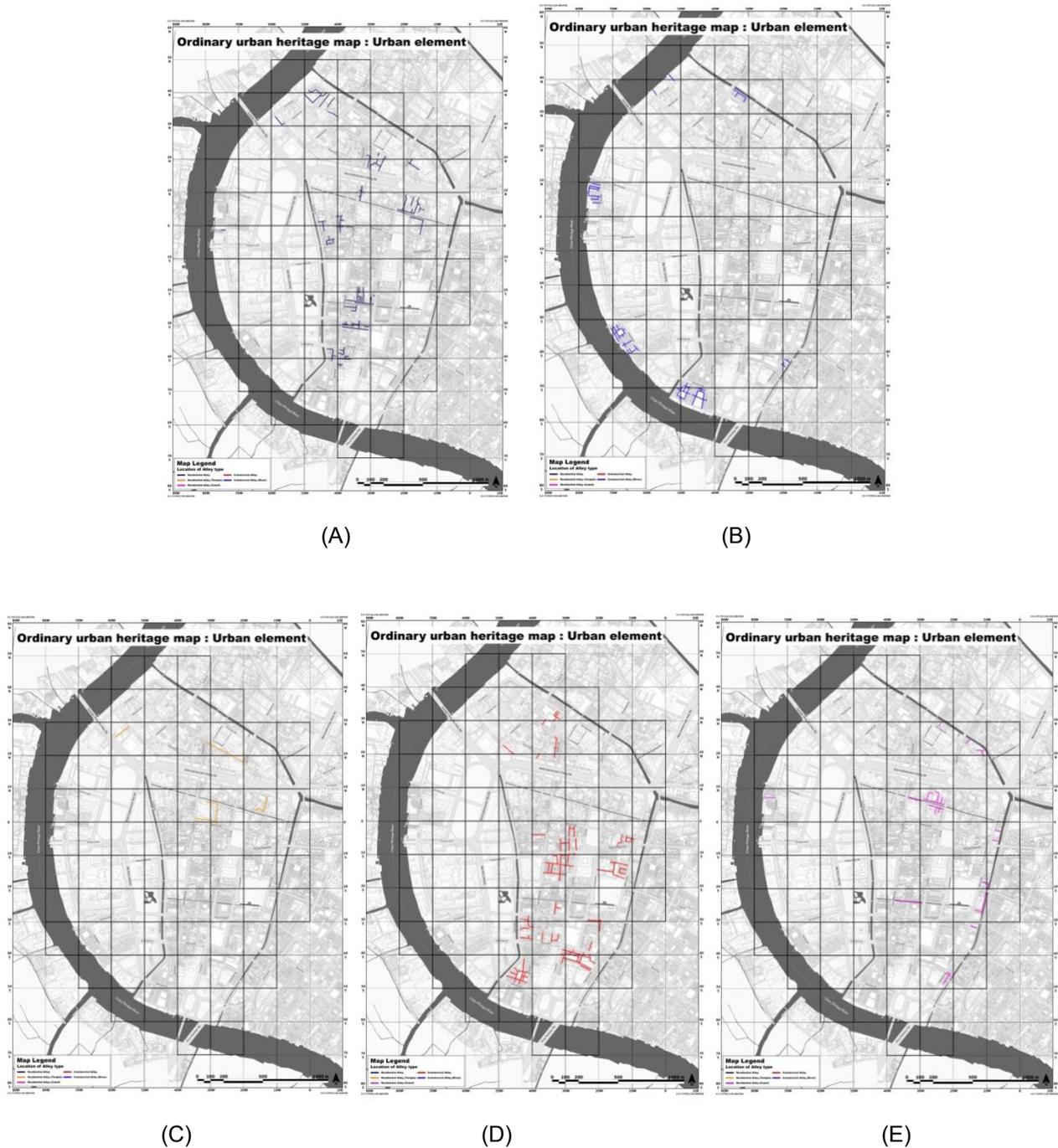
Parts of the Map Represent the Location of Different Types and Characteristics of Trok



Note. Adapted from *Khronkan Wichai Phaenthi Moradok Muang Saman Krung Rattanakosin* [Ordinary Urban Heritage Map in Rattanakosin Area], by P. Jhearmaneechotechai, P. Povatong, C. Fusinpaiboon & P. Chatakul, 2023, Faculty of Architecture, Chulalongkorn University. Copyright 2023 by P. Jhearmaneechotechai, P. Povatong, C. Fusinpaiboon & P. Chatakul.

Figure 7

Types and Characteristics of Trok



Note. Adapted from *Bangkok Three-Dimensional Geographic Information System map in 2013*, by Department of City Planning, Bangkok Metropolitan Administration. A research project: *Khrongkan Wichai Phaenthi Moradok Muang Saman Krung Rattanakosin* [Ordinary Urban Heritage Map in Rattanakosin Area], by P. Jhearmaneechotechai, P. Povatong, C. Fusinpaiboon & P. Chatakul, 2023, Faculty of Architecture, Chulalongkorn University. Copyright 2023 by P. Jhearmaneechotechai, P. Povatong, C. Fusinpaiboon & P. Chatakul.

Residential Trok

The residential *Trok* are within the urban blocks of Rattanakosin (Figure 7(A)). These narrow passageways connect houses and often feature traditional wooden architecture. Their width typically ranges from 1 to 3 meters, accommodating foot traffic, bicycles, motorcycles, and cars. Examples of such *Trok* are at junctions and community entrances (Figure 6, map part #6), (Figure 8 (A)). The buildings on both sides of the lane are traditional local wooden houses and shophouses, the Trok Kien Niwat (Figure 7(B)) and the Trok Kai Jae (Figure 8(C)) and the Chakrapong Mosque (Figure 8(D)). The residential *Trok* were cut as single access from a road or formed interconnection with two roads: from Chakrapong Road to the east and from Phra Sumen Road to the northeast (Figure 8(E)).

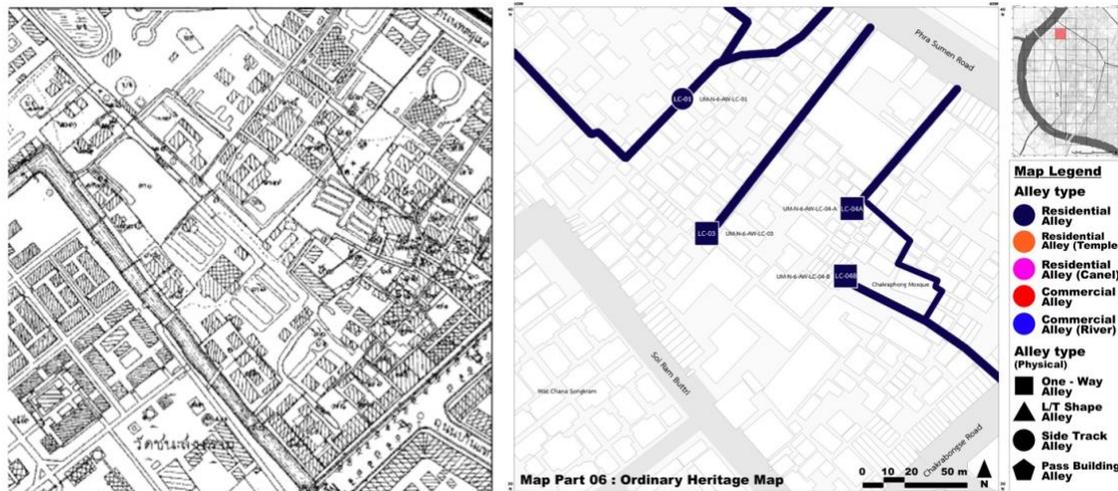
In the residential *Trok*, the sacred spaces are also located in public spaces in front of the *Trok* on the main road or at the junction of *Trok*. These sacred spaces are generally found as the "San Phra Bhumi" or the God of the land spirit house (San is spirit house, Phra Bhumi is God of the land) (Figure 8(F), (G)).

River-Perpendicular Trok

The second type of *Trok* connects the Chao Phraya River to the main roads. These alleys facilitate the transportation of goods between the river, markets, and shophouses to the road (Figure 6, map part #25, Figure 9 (A)). Two subcategories of river-perpendicular *Trok* are, the first, shophouse-penetrating *Trok*, exemplified by Trok Prachan Klang (Figure 9, (B) and (C)) that cut through the ground floor of shophouses creating a pathway on the ground floor level from the road to the river. While the overall width of the *Trok* is approximately 4 meters, they are occupied by amulet vendors, leaving only a narrow pedestrian walkway of about 1.2 meters. The *Trok* are partially shaded by overhanging structures from the shophouses. Another subcategory is the networked *Trok*, including Trok Nakorn, Trok Sanampra, and Trok Mahatat, which connect to the main road. These *Trok* form an interconnected network of walkways within the block (Figure 9(D), (E), (F)) and are associated with shophouses selling amulets and sacred products. The width of these *Trok* is also occupied by stalls and tables. The space in the middle of the *Trok* primarily accommodates foot traffic, with some allowing for motorcycle passage. These river-perpendicular *Trok* exemplify the intersection of urban form between river and road manifesting the everyday heritage of commercial activity.

Figure 8

Map Part #6



(A)



(B)



(C)



(D)



(E)



(F)



(G)

Note. Map part #6 represents the *Trok* connecting to the communities from the road. (A) (Left) Adapted from *Map of Rattanakosin in 1896*, by Royal Thai Survey Department and Historical maps and documents on Urban and Architectural Research Unit, Faculty of Architecture, Chulalongkorn University. Copyright by Royal Thai Survey Department and Historical maps and documents on Urban and Architectural Research Unit, Faculty of Architecture, Chulalongkorn University. (Right) Adapted from *Bangkok Three-Dimensional Geographic Information System map in 2013*, by Department of City Planning, Bangkok Metropolitan Administration, 2013. A research project *Khrongkan Wichai Phaenthi Moradok Muang Saman Krung Rattanakosin* [Ordinary Urban Heritage Map in Rattanakosin Area], by P. Jhearmaneechotechai, P. ovatong, C. Fusinpaiboon & P. Chatakul, 2023, Faculty of Architecture, Chulalongkorn University. Copyright 2023 by P. Jhearmaneechotechai, P. Povatong, C. Fusinpaiboon & P. Chatakul. (B) (F) Trok Kien Niwat, (C) Trok Kai Jae, (D) (G) Trok Chakrapong Mosque, (E) Trok Faro. *Source:* photos taken by the author (2024).

Figure 9

Map Part # 25



(A)



(B)

(C)

(D)



(E)

(F)

Note. (A) Map part # 25, the example of *Trok* connected to the river, (A) (Left) Adapted from *Map of Rattanakosin in 1896*, by Royal Thai Survey Department and Historical maps and documents on Urban and Architectural Research Unit, Faculty of Architecture, Chulalongkorn University. Copyright by Royal Thai Survey Department and Historical maps and documents on Urban and Architectural Research Unit, Faculty of Architecture, Chulalongkorn University. (Right) Adapted from *Bangkok Three-Dimensional Geographic Information System map in 2013*, by Department of City Planning, Bangkok Metropolitan Administration, 2013. A research project *Khrongkan Wichai Phaenthi Moradok Muang Saman Krung Rattanakosin* [Ordinary Urban Heritage Map in Rattanakosin Area], by P. Jhearmaneechotechai, P. Povatong, C. Fusinpaiboon & P. Chatakul, 2023, Faculty of Architecture, Chulalongkorn University. Copyright 2023 by P. Jhearmaneechotechai, P. Povatong, C. Fusinpaiboon & P. Chatakul. (B) Trok Prachan Klang (entrance from the road), (C) Trok Prachan Klang (commercial space along the *Trok*), (D) Trok Nakorn, (E) Trok Sanampra, and (F) Trok Mahatat. Source: photos taken by the author (2023).

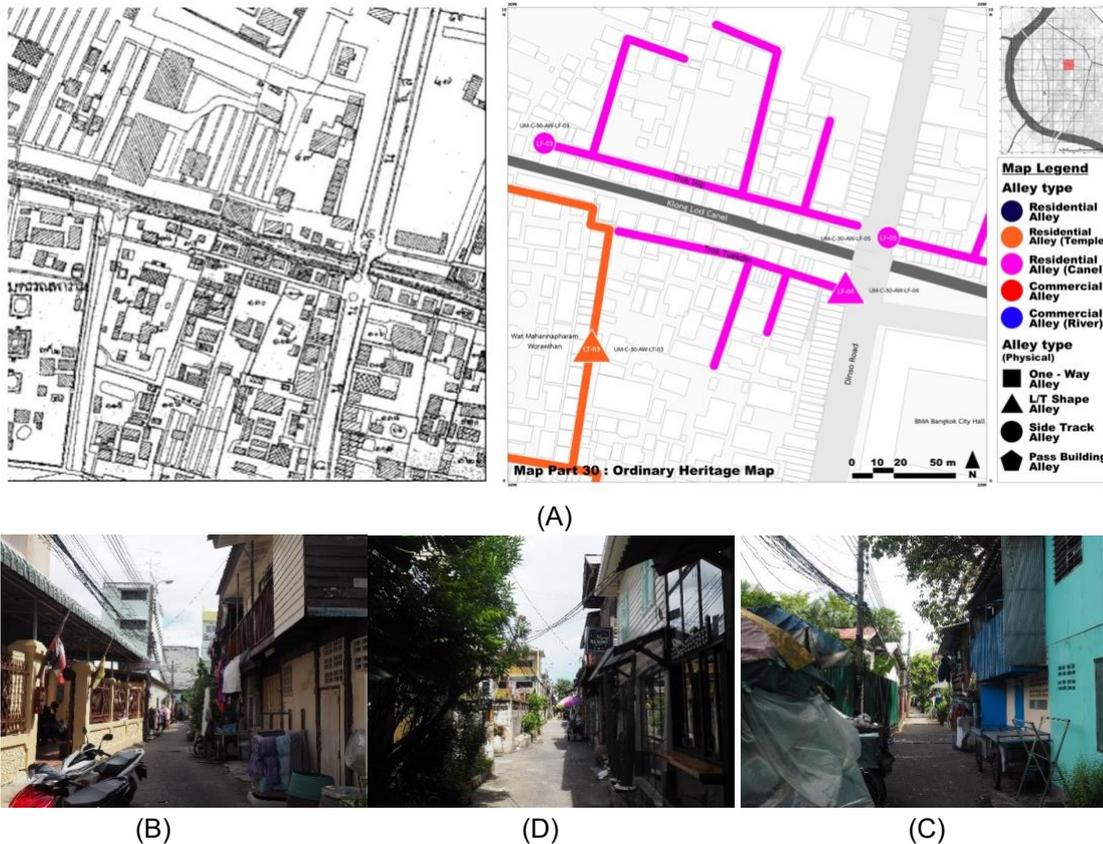
Temple Trok

The third type of *Trok* has two sub-categories. The first is a small alley that runs along the outer wall of Buddhist temples. These *Trok* are the entrance to communities that settle on temple land (Figure 6, map part #30, Figure 10 (A) Orange line). Historically, these communities were accessed by the canal. *Trok* was cut from the canal to the temple allowing the rows of houses to be built. An example of this type of *Trok* can be found along the Mahannaparam Temple (Figure 10(B)). Another subcategory is

the *Trok* providing access to the Mahanaparam Temple and community from the East along a canal (Figure 10 (A) Pink line). The houses can also be accessed by two parallel *Trok*: Trok Tuek Din (Figure 10 (A), Pink line on the upper part of the canal, Figure 10 (C)) and Trok Silp on the opposite side of the canal (Figure 10 (A), and a pink line on the lower part of the canal, Figure 11 (D)). These *Trok*, are typically 4 meters wide and accommodate two-story traditional wooden houses. During the day, the *Trok* are used for community activities, while at night, they serve as storage for street food vendor carts.

Figure 10

Examples of Trok Along Wat (Buddhist Temple) and Along the Canal



Note. (A) Map part #30, (A) (Left) Adapted from *Map of Rattanakosin in 1896*, by Royal Thai Survey Department and Historical maps and documents on Urban and Architectural Research Unit, Faculty of Architecture, Chulalongkorn University. Copyright by Royal Thai Survey Department and Historical maps and documents on Urban and Architectural Research Unit, Faculty of Architecture, Chulalongkorn University. (Right) Adapted from *Bangkok Three-Dimensional Geographic Information System map in 2013*, by Department of City Planning, Bangkok Metropolitan Administration, 2013. A research project *Khronkan Wichai Phaenthi Moradok Muang Saman Krung Rattanakosin* [Ordinary Urban Heritage Map in Rattanakosin Area], by P. Jhearmaneechotechai, P. Povatong, C. Fusinpaiboon & P. Chatakul, 2023, Faculty of Architecture, Chulalongkorn University. Copyright 2023 by P. Jhearmaneechotechai, P. Povatong, C. Fusinpaiboon & P. Chatakul. (B) Trok Mahannop, (C) Trok Tuekdin, and (D) Trok Silp. *Source:* photos taken by the author (2024).

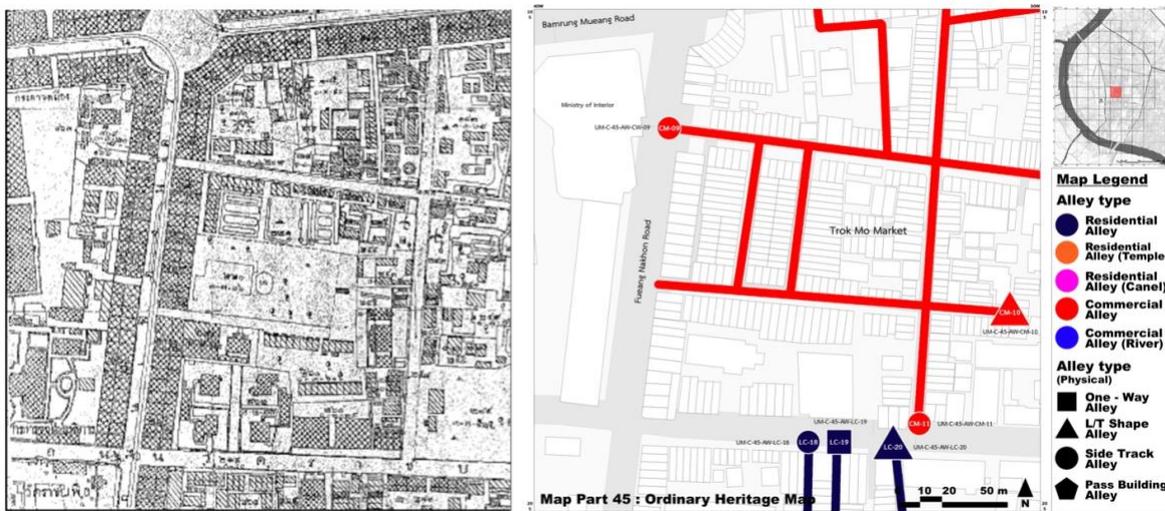
Commercial Trok

The commercial *Trok* are in the Rattanakosin commercial areas. Ground-floor shops in these areas are accessed via *Trok* (Figure 6, map part #45, Figure 11 (A)) forming a network of walkways within the commercial blocks (Figure 11(A), red lines). Map part #45 (Figure 6) provides an example of this type. The shophouses along these *Trok* are mixed-use

buildings, with shops on the ground floor and residences above. The *Trok* are used not only for pedestrian traffic but also for temporary morning markets, such as Trok Mor Market (Figure 11(B), 11(C), 11(D)). During the market hours, merchants occupy the space in front of shophouses, renting small areas from the owners. The width of these *Trok* ranges from 4 to 6 meters, allowing for commercial activities, walking, and car access for deliveries.

Figure 11

Trok Located in the Commercial Area



(A)



(B)



(C)

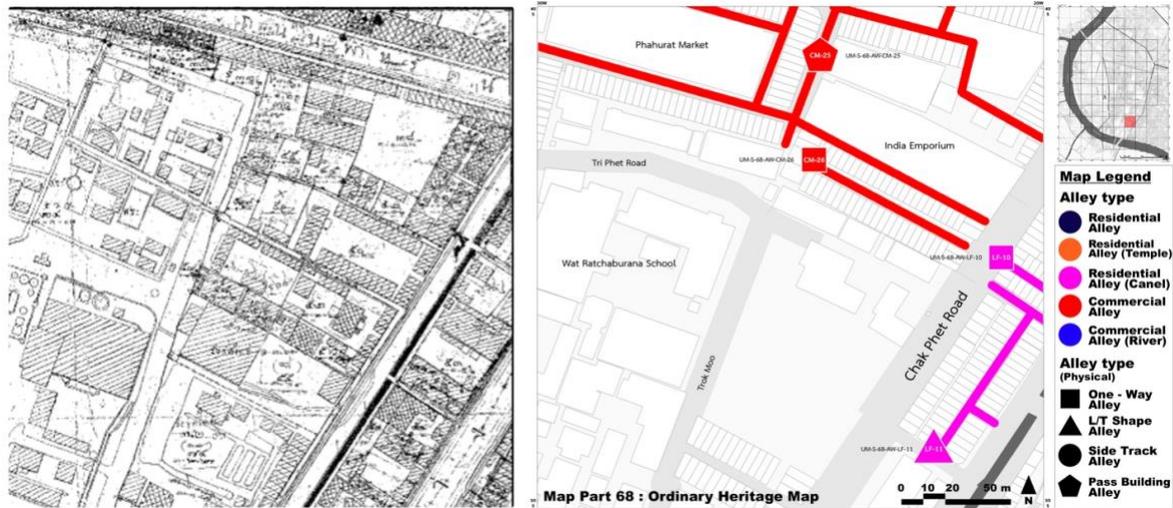


(D)

Note. (A) Map part #45, (A) (Left) Adapted from *Map of Rattanakosin in 1896*, by Royal Thai Survey Department and Historical maps and documents on Urban and Architectural Research Unit, Faculty of Architecture, Chulalongkorn University. Copyright by Royal Thai Survey Department and Historical maps and documents on Urban and Architectural Research Unit, Faculty of Architecture, Chulalongkorn University. (Right) Adapted from *Bangkok Three-Dimensional Geographic Information System map in 2013*, by Department of City Planning, Bangkok Metropolitan Administration, 2013. from *Khrongkan Wichai Phaenthi Moradok Muang Saman Krung Rattanakosin* [Ordinary Urban Heritage Map in Rattanakosin Area], by P. Jhearmaneechotechai, P. Povatong, C. Fusinpaiboon & P. Chatakul, 2023, Faculty of Architecture, Chulalongkorn University. Copyright 2023 by P. Jhearmaneechotechai, P. Povatong, C. Fusinpaiboon & P. Chatakul. (B) Trok Sukha 1, (C) Trok Sukha 2, and (D) Trok Tesa. *Source:* photos taken by the author (2023).

Figure 12

Trok Connecting to the Ring Canal of Rattanakosin



(A)



(B)



(C)

Note. (A) Map part #68, (A) (Left) Adapted from *Map of Rattanakosin in 1896*, by Royal Thai Survey Department and Historical maps and documents on Urban and Architectural Research Unit, Faculty of Architecture, Chulalongkorn University. Copyright by Royal Thai Survey Department and Historical maps and documents on Urban and Architectural Research Unit, Faculty of Architecture, Chulalongkorn University. (Right) Adapted from *Bangkok Three-Dimensional Geographic Information System map in 2013*, by Department of City Planning, Bangkok Metropolitan Administration, 2013. A research project *Khrongkan Wichai Phaenthi Moradok Muang Saman Krung Rattanakosin* [Ordinary Urban Heritage Map in Rattanakosin Area], by P. Jhearmaneechotechai, P. Povatong, C. Fusinpaiboon & P. Chatakul, 2023, Faculty of Architecture, Chulalongkorn University. Copyright 2023 by P. Jhearmaneechotechai, P. Povatong, C. Fusinpaiboon & P. Chatakul. (B) LF-10, no name, and (C) LF-11, no name. *Source:* photos taken by the author (2023).

Canal-Side Trok

The last type of *Trok* are located along the ring canal of Rattanakosin (Figure 6, map part #68), Figure 7(E)), can be categorized into two patterns: 5.1 Perpendicular Trok: These Trok connect the canal to the road (Figure 12 (A), pink line with a square pink shape). They form a space between two rows of shophouses and restaurants on the ground floor. The space in

front of or beside these shophouses is occupied by shops with awnings, signs, and seating areas (Figure 12(B)). 5.2 Parallel Trok: These Trok run parallel to the canal (Figure 12 (A), pink line with a triangle pink shape). The shophouses along these Trok are primarily residential, with parking spaces for cars under shading overhangs (Figure 12(C)).

FINDINGS

Findings from Reviews, Map Analysis, and Surveys for the Framework of the OUH Mapmaking Process

An analysis of the historical maps reveals the location of *Trok* and the urban pattern, but there are no details about the elements, atmosphere, or the way people use these spaces. They only show lines or paths without telling what activities happen there. However, the Non-Participatory Field Survey revealed many ordinary and everyday activities that are not shown on the historical maps. The surveys reveal that *Trok* are active, multifunctional spaces that support a variety of ordinary and daily uses. These include small-scale commercial activities, such as informal vending, residential support functions, such as access to homes and communal interaction, and the placement of potted plants, which enhance the environment and contribute to informal landscaping. In some cases, spirit houses are installed within these spaces, reflecting the community's spiritual practices and transforming parts of the *Trok* into sacred spaces. Additionally, these alleys are often used for resting, socializing, or temporary parking. These activities show that *Trok* are important parts of daily life in the community, even though this is not shown clearly on the historical maps.

OUH mapping (Figure 13, A1.1, A1.2), in the case of *Trok*, involves cultural mapping that not only represents the urban pattern but also uncovers heritage related to everyday activities. The *Trok* mapping applies the principles of a cultural mapping approach based on local culture. The Ordinary Urban Heritage mapping in this paper initially proceeded with map analysis and surveys focused on identifying the ordinariness and everydayness of heritage in Rattanakosin. This research's first phase of non-participatory surveys explored academic and artistic approaches (Figure 13, A1.1.4, A1.1.5). In this context, the local heritage, particularly OUH that expresses the ordinariness and everydayness of *Trok*, has not been adequately

explored through cultural mapping. When creating a cultural map of OUH, it must first be understood that mapping is neither reproduction nor imposition, but rather a process of uncovering unseen or unimagined realities and helping to define undiscovered possibilities. *Trok* represent local heritage, the cultural mapping then employed two scales: the intimate scale, which focuses on the study area of a specific OUH location, and the intermediate scale, which encompasses the study community or a district (Figure 13, A1.2.1/A1.2.2).

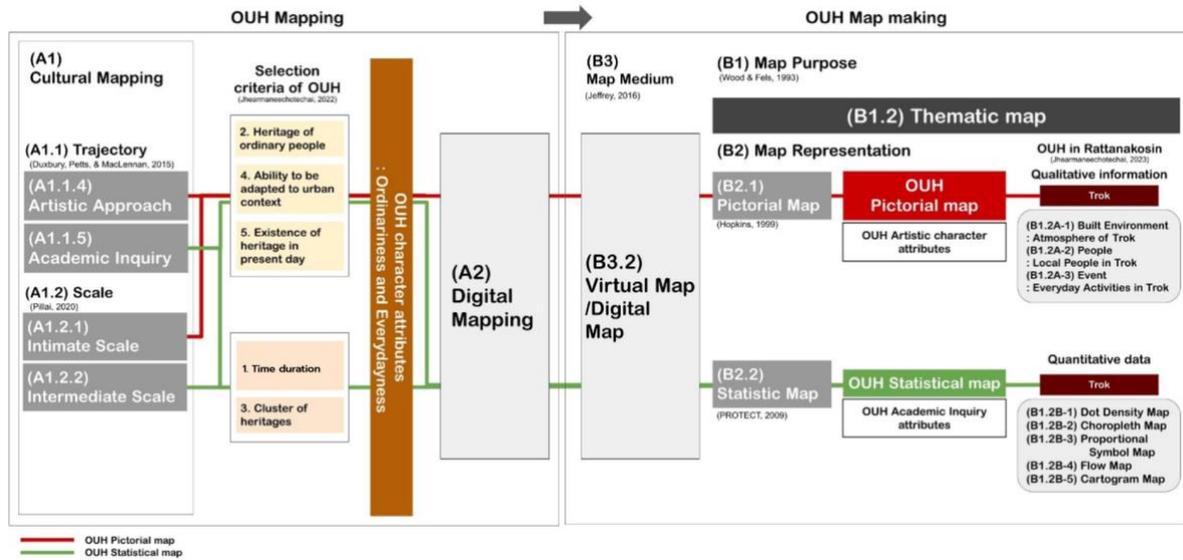
The OUH map representation can be divided corresponding to two groups of selection criteria. The OUH pictorial map relates to qualitative attributes: criterion #2 (Ordinary People's Heritage), criterion #4 (Heritage Adaptation from Urban Context), and criterion #5 (Existence of Heritage in the Present Day). These criteria relate to qualitative information that can be presented thematically. They correspond to the purpose of creating an academic and artistic map to explore the ordinariness, adaptation, and current characteristics of OUHs in Rattanakosin. The map representation and medium for this group should be dynamic and able to present the history and changes of heritage over time, up to its present-day appearance.

The second group is the OUH statistical map, which deals with quantitative attributes: criterion #1 (length of time the heritage has existed) and criterion #3 (clusters of heritages). This group also presents OUH information thematically but focuses on quantitative data. The purpose of mapmaking and representation here is to explore, academically and artistically, the quantifiable timeline and clustering of OUH in Rattanakosin. OUH maps are well-suited for thematic representation because they can depict specific information from diverse data sets.

The OUH map can set the system of mapmaking through the virtual/digital map as the framework of map outcome (Figure 13, A2). The virtual/digital map is capable of illustrating both the qualitative and quantitative characteristics of local heritage within communities, as well as the atmosphere of the heritage context, including the interaction of heritage with local people.

Figure 13

Summary of OUH Mapmaking Framework



Note. Summary of OUH mapmaking framework by P. Jhearmaneechotechai (2025). Adapted from *Khrongkan wichai choeng patibatkan ok baep phua sangkhom - saha sat phua phatthana ongkhwamru dan kan okbaep lae chattham phaenthi moradok muang saman khong krung Rattanakosin* [Social Design Action Research Project - Multidisciplinary Knowledge Development for Design Practice and Ordinary Urban Heritage Mapping in Historic Rattanakosin Area], by P. Jhearmaneechotechai, P. Povatong, C. Fusinpaiboon & P. Chatakul, 2023, Faculty of Architecture, Chulalongkorn University. Copyright 2025 by P. Jhearmaneechotechai.

OUH mapmaking has the specific purpose of mapping OUH in Rattanakosin (Figure 13, B1). The Thematic map format (Figure 13, B1.2) is appropriate for presenting *Trok*. For OUH map representation (Figure 13, B2), both pictorial (Figure 13, B2.1) and statistical maps (Figure 13, B2.2) can be used to represent *Trok*.

Because the principle of OUH relates to the heritage of everyday life, which is dynamic and can change throughout the day and night, a pictorial map can effectively represent the history and atmosphere of the *Trok*, including the activities that demonstrate the ordinariness and everydayness of this ordinary urban heritage. A statistical map is appropriate for presenting the clusters of countable activities within the *Trok*. The OUH pictorial map represents the artistic characteristics of the ordinariness and everydayness of OUH through qualitative information on the built environment, such as the atmosphere of *Trok* (Figure 13, B1.2A-1), local people in the *Trok* (Figure 13, B1.2A-2), and events within the *Trok* as everyday activities (Figure 13, B1.2A-3). The OUH statistical map

represents the academic attributes of five quantitative data types: (1) A dot density map displays numerical information about OUH points on the map, such as the location of activities in the *Trok* (Figure 13, B1.2B-1). (2) A choropleth map presents information on activity intensity (Figure 13, B1.2B-2). (3) A proportional symbol map presents the shapes and patterns of Troks (Figure 13, B1.2B-3). (4) A flow map is applicable for showing movement within Troks (Figure 13, B1.2B-4). (5) A cartogram map represents the different elements of daily activities that occur in Troks (Figure 13, B1.2B-5).

The map medium for *Trok* can utilize a virtual or digital map (Figure 13, B3.2), as the OUH map must represent the heritage of everyday life, which changes throughout time. Therefore, the mapmaking process must be updatable and capable of showing dynamic content and scales.

The characteristics of ordinariness and everydayness within *Trok* are identified through five key selection criteria that reflect both spatial and cultural dimensions:

1. The presence of built elements such as small-scale commercial spaces, residential support functions, and spirit houses that have existed for over 50 years demonstrates the historical continuity and long-term use of these spaces.

2. These elements are primarily created and maintained by ordinary people. For instance, informal pedestrian pathways are often constructed by local residents to enhance accessibility to their homes and support commercial activities. Additionally, spirit houses are frequently situated at intersections or junctions within *Trok*, functioning as sacred spaces that embody community beliefs and practices.

3. The observed cultural elements typically appear as spatial clusters rather than isolated features. This includes the distribution of spirit houses throughout the alleys, indicating a collective spatial logic and cultural pattern.

4. The *Trok* are embedded within the broader urban fabric and serve multiple urban functions. They contribute to the local economy through informal commerce, provide employment opportunities, attract tourism, and support unique cultural activities. Examples include amulet markets, religious goods shops, and small food vendors integrated into the *Trok*.

5. Survey findings confirm the ongoing presence of spaces dedicated to commerce, residential support, and sacred practices within these alleys, indicating that the cultural functions of *Trok* remain active and relevant in the present day.

Together, these criteria support the identification and interpretation of the *Trok* themselves as a significant form of OUH indicating a distinct urban pattern characteristic of Rattanakosin. Emphasizing its role as a fundamental urban space, the *Trok* provide the setting and allows for the flourishing of other ordinary urban heritages such as small-scale commercial activities, spirit houses, and diverse cultural practices, sustaining everyday urban life and cultural continuity within the city.

The framework for OUH mapmaking of *Trok* integrates cultural and digital mapping. The OUH mapping must be verified against the five selection criteria before the OUH map is created.

This map establishes the purpose of the mapmaking through thematic mapping. The digital mapping should be integrated into the mapping process as an updatable database of the OUHs that corresponds to the dynamics of everyday heritage.

DISCUSSION

The development of a framework for Ordinary Urban Heritage (OUH) mapmaking was initiated due to the lack of effective tools to represent the dynamics of everyday heritage in urban contexts. Existing mapping practices, particularly those used for cultural heritage, often fail to capture the fluid, lived experiences and spatial nuances of ordinary people. These maps tend to prioritize monumental or official heritage sites, often omitting informal urban patterns, such as *Trok*, that are vital to local communities.

This study proposes an alternative approach to cultural mapping by integrating digital tools and thematic cartography into a novel framework for OUH mapmaking. The framework is grounded in five selection criteria, derived from a combination of literature review, historical map analysis, and field surveys: (1) time duration, (2) ordinary people's heritage, (3) cluster formation of everyday heritage, (4) adaptation to urban context, and (5) present day existence. These criteria were operationalized to identify and classify OUH, particularly as manifested in the *Trok* of Rattanakosin.

Unlike traditional cultural mapping, which often documents static heritage features, this framework emphasizes temporality and ordinariness. For instance, the presence of spirit houses, informal retail, local everyday commercial activities, and residential-supported spaces found during field surveys was not apparent in historical maps. These subtle but meaningful cultural elements were visualized using pictorial and statistical maps that captured both qualitative ambiance and quantitative patterns. By applying digital cartography, the framework enables continuous updates and reflects changes in real time, a feature crucial for managing dynamic urban heritage.

The framework also incorporates different scales of mapping: the intimate scale (single buildings

or alley segments) and the intermediate scale (neighborhood or district level). This dual-scale approach responds to the spatial characteristics of *Trok*, which function both as local thoroughfares and collective cultural spaces.

The analysis revealed overlapping characteristics among the five types of *Trok*, such as shared spatial configurations and co-existing functions (e.g., commercial, sacred, and residential uses). Rather than rigid categories, these overlaps underscore the fluid and multi-functional nature of OUH, reinforcing the need for flexible mapping tools.

Finally, while this study is rooted in the specific context of Rattanakosin, its theoretical contributions extend to the broader discourse on everyday urbanism, ordinary heritage, and cultural cartography. The framework offers a replicable model for mapping the everydayness of cities and contributes to the growing interest in bottom-up heritage recognition practices.

The OUH mapmaking framework analyzed reviews of current mapping and mapmaking practices. This mapping process should integrate not only cultural mapping but also digital cartography. Cultural mapping encompasses trajectories and scales that relate to the application of the five selection criteria of OUH, presenting its characteristics as dynamic, ordinary, and everyday heritage. The limitation of a fixed scale in traditional maps, both as a single-scale representation and in capturing the dynamic characteristics of OUH, can be improved by digital approaches. The OUH mapping process adopted both an academic inquiry and an artistic approach, exploring the non-participatory investigation of *Trok* as heritage itself and the place where that heritage manifests. Digital cartography facilitates the development of a research framework with more diverse tools for displaying map data. This OUH mapping also utilized digital tools and information to create pictorial and statistical maps.

The OUH selection criteria were applied throughout the mapping and mapmaking processes. The map's purpose, representation, and medium within this framework required specific OUH characteristics, sorted according to the five selection criteria, emphasizing the ordinariness and everydayness of OUH.

The OUH mapmaking framework, as applied to *Trok*, explored the dynamics of everyday cultural life. The thematic map represents OUH, which possesses both qualitative and quantitative characteristics. To capture the dynamic nature of OUH through the representation of *Trok*, a virtual or digital map can reveal its dynamic characteristics and daily activities. This framework in Rattanakosin, exemplified by the case of *Trok*, can serve as an applicable model for other cultural mapping and mapmaking projects that need to respond to updatable, dynamic, and complex map representations in other areas in the future.

CONCLUSION

This study presents a framework for mapmaking Ordinary Urban Heritage (OUH) through the case of *Trok* in Rattanakosin, Bangkok's historic center. The framework's significance lies in its ability to reveal the overlooked dimensions of urban heritage—those shaped by the daily lives of ordinary people. Through a combination of cultural and digital mapping, the framework offers a dynamic and multi-scalar method for representing the ordinariness and everydayness embedded in the urban fabric.

The framework addresses key limitations in conventional cultural mapping by introducing five selection criteria that bridge qualitative and quantitative mapping methods. It also integrates digital mapping tools to accommodate the temporal and evolving nature of OUH, enabling continuous documentation and adaptive heritage management.

The application of this framework to *Trok* not only enhances the visibility of underrepresented urban elements but also generates a spatial database that can inform strategic urban planning and conservation policies. The findings show that OUH elements often appear in clusters and serve diverse community functions, reinforcing their cultural significance despite their informal or unofficial status.

The study acknowledges several limitations. The survey was non-participatory, which may restrict the depth of lived experience captured. Further research could incorporate participatory approaches to enrich the representation of OUH.

In addition, while this study focused on *Trok*, future applications of the framework could explore other urban elements or compare different city contexts to test its transferability and robustness.

Lastly, this framework contributes to the advancement of heritage studies by expanding the methodological and conceptual toolkit for mapping everyday urban life. It opens new pathways for inclusive, flexible, and dynamic heritage documentation that better aligns with the lived realities of contemporary cities.

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