REVIEW ARTICLE

Reflections on the importance of built heritage inventory as a tool for preservation in Karachi–a case study of *Wadhumal Odharam* (Jail) Quarter in Karachi, Sindh, Pakistan

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Abstract

The cultural heritage inventory is an alternate tool to document historic buildings to establish a protected enlistment process. Recognising the importance of inventories for developing knowledge of historical and cultural patterns, multiple attempts are being made to record Karachi's historic buildings in the form of inventory documents. This research investigates the various approaches used for inventorying Karachi's cultural heritage and their potential impact on the survival of the city's historical ensemble. As literature, this research provides a brief overview of Karachi's architectural development before and after its annexation to the British Raj (Term used by scholars to represent the British Crown in India. The term 'The Raj' is also sometimes used.) (1843–1947), which is now considered the historic core of the city of Karachi, together with the systems of inventorying the built heritage over time. *Wadhumal Odharam* (Jail) Quarter is shortlisted as a case study for this research, which will be examined from the perspective of inventory making in relation to its specific physical and sociocultural context as documented through the inventorying process. The Quarter is also referred to as 'Jail Quarter' because of the presence of the Jail building within the Quarter precinct, which was demolished during the British era; it is discussed in further detail later in this article. The research approach follows a survey of the quarter conducted between August and September 2022, followed by a mapping of the historic properties. The inventory mapping of the Quarter is performed by using an available database (Database of various historic Quarters of Karachi by Heritage Cell-DAPNED). The data for inventory also helps provide an understanding of the history and development of the area. The other aspects of the research methodology include intreating questions and collecting data about various aspects of the Quarter, such as the building information, photographic documentation of the properties, and analysis of the present conservation status based on inventory mapping. Moreover, this study also suggests that inventorying aided the enlistment process for the Quarter under the Sindh Cultural Heritage Preservation Act 1994 (SCHPA), which was first implemented in 1997 and again in 2011 until 2021. The protected status helped stop the illicit demolitions; however, vandalism continued in many forms, for instance, the need-based alterations relying on the ever-increasing population, upgradation of the building bylaws, inadequate heritage legislation and its enforcement.

Keywords Inventorying, Inventory making, Heritage conservation, Commercialisation pressure

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1 Introduction

The dynamic and sustainable ecosystems of cities are driven by a balance between new developments and existing historical places on economic, cultural, and social levels (El Menchawy, Aly, and Hakim 2011). To achieve urban sustainability, interconnected processes operating at multiple urban scales create a complex socioenvironmental network that involves the adaptive reuse of historic structures (Shah et al. 2023). Historic structures are a crucial component of the historical evolution and identity of nations, but in the case of developing countries such as Pakistan, they are considered relatively unfavourably. The exceptional rate of urbanisation creates a wide range of impacts on the city's historic built fabric. According to a recent United Nations assessment report (2017), 69% of the world's population will live primarily in urban areas by the year 2050 (Kiruthiga and Thirumaran 2019). Due to the lack of resources needed for livelihood, heritage protection continues to rank low on the list of priorities (Soomro, Agha, and Pasha 2020). A built heritage inventory is useful in these situations where preservation is challenging for a variety of reasons, including raising awareness of historical preservation and emphasising its significance to both individuals and society at large. It is the first point of identification that may influence city development in a sustainable way. Inventory, listing, and registry are some of the terminologies used to describe a process of cataloguing tangible or intangible assets referred to in any discipline. Typically, inventories list the historic sites that have been deemed worthy of legal protection and have significant cultural, architectural, historical, or social value. Typically, the inventory contains a thorough description of each building or structure, photographs, maps, and other pertinent information. The inventory-making process involves a team of experts who do the survey and are a part of the process of preserving heritage (Thorne 1992; Wan Ali and Ahmad 2021). The data acquired from such surveys are then put together into a multi-layered database that is valuable for the public, government organisations, and other stakeholders in making sound decisions on the management and preservation of built heritage. An ideal inventory should record the location and spatial extent of heritage places and reflect whether they still exist, have been destroyed, or otherwise have been significantly altered or degraded (Myers 2016).

UNESCO recognises the importance of built heritage inventory and has been working to promote its value for many years. (UNCSO 1970) UNESCO acknowledges that the built heritage inventory is an essential instrument for identifying, documenting, and preserving cultural heritage assets, both tangible and intangible (UNESCO 2014). A built heritage inventory can help ensure that valuable cultural assets are protected, managed, and promoted for future generations to enjoy. UNESCO, in its working papers, refers to it as the "National Cultural Heritage registry, list or inventory". It further elaborates as inventories as follows:

> *"...official data banks or lists of historically or culturally significant man-made immovable properties, landmark buildings, industrial facilities, memorial homes of notable people of the past, monuments, cemeteries and tombs, archaeological sites and cultural landscapes – man-made environments and natural habitats significantly altered by humans - present in the national territory, which have been recognized as having heritage value through an official selection process and separately identified and recorded" (Heritage year).*

Acknowledging the importance of a comprehensive historic inventory as the basis for structured safeguarding, this study explores the various strategies used to compile an inventory of Karachi's cultural assets. It aims to see how different approaches may affect the long-term survival and maintenance of the city's historic ensemble with respect to the specific case study. The study also focuses on the gaps existing within the current system of inventorying and measures its pros and cons. Historically, the present-day city of Karachi was developed in 1729 as a fishing village, came under British occupation in 1839 (Burton 1877; Baillie 1890; Hasan 2022) and became the capital of newly developed Pakistan in 1947. It was formerly a part of the greater British Raj. During the British Raj, the Indian subcontinent (present-day South Asia) was divided into archaeological circles based on geographic positioning. The British interest in heritage started with the establishment of the Royal Asiatic Society on Jan 15, 1784, in Calcutta by Sir William Jones to investigate the art, science, literature and monumental heritage of Asia (Pant 2012). The Bengal Code-XIX in 1810 and The Madras Code VII in 1817 were two critical legal acts that were made possible because of this initial endeavour. Eventually, under the patronage of Lord Curzon, the Viceroy of India, in 1899, the Ancient Monuments Act of 1904 was enacted. The primary objective of this act was to preserve ancient monuments with archaeological, historical, or artistic significance (Pant 2012; Basu and Damodaran 2015). Notably, this was the first time an inventory of the monuments was developed, along with the advent of the concept of 'ancient monument enlistment'.

After independence in 1947, Pakistan (East and West) adopted the already existing British organisational structure for the management of cultural heritage (Khan et al. 2022). The British were particularly interested in

categorising cultural heritage into various styles; thus, the concept of inventory-making already existed in the context of Pakistan, but the detailed procedure of acquiring a multilayer database may have been gained later. At present, several institutions are working for inventorying and documenting Pakistan's built heritage, such as the Survey of Pakistan's Architectural Heritage, National Inventory of Cultural Heritage, Provincial Culture Departments, The Heritage Foundation Karachi, and Heritage Cell-Department of Architecture and Planning NED University (HC-DAPNED).

In view of the foregoing introduction and the context, this study will pursue the following aims:

– An overview of the notion of built heritage inventory and its significance in the context of architectural preservation.
– Development of a strategic inventorying system for Karachi based on an investigation of the institutions engaged in the practice.
– Inventorying process of *Wadhumal Odharam* (Jail) Quarter - Role of Inventorying in the preservation and present conservation status of the built heritage within the Quarter.

This study delves into identifying and analysing the limitations of the current system. This research endeavours to facilitate the development of a more sophisticated and sterner framework for safeguarding cultural heritage in the context of Karachi. Additionally, the focused subject is understudied; thus, the study offers a thorough and multifaceted perspective on the subject, encouraging further thought and discussion.

2 Research methodology

The research methodology adopted for this study is based on the triangulation method, where a variety of data from numerous sources are extracted, analysed, and synthesised to acquire the results. The site area selected for this research is in the historic *Wadhumal Odharam* (Jail) Quarter; the details of the Quarter are discussed later in this article. The process of research and investigation is divided into three categories as follows: The literature review helped in developing an in-depth understanding of the subject by looking at it from the perspective of local and international literary sources, including both published and nonpublished, as well as reviewed, and non-peer reviewed materials. This stage was coupled with the archival analysis of literary and graphical sources. Several archives, as shown in Tables 1 and 2, were accessed to obtain the critical material data. Then, an investigation of the available list of inventories of the Quarter from 1995–1997 and 2011 was conducted.

The basic tool adopted for mapping the quarter is the application of the Core Data Index Form (CDIF),[1] which is based on scientific heritage building selection criteria developed by HC-DAPNED (Naeem 2011). The CDIF provides an extensive database for each property to which it is applied. The research is initiated by examining the existing CDIF database of the quarter by HC-DAPNED. Further research is developed upon it by surveying the properties at present. Despite the overall comprehensiveness of the CDIF method, this research identifies specific gaps within the process together with comments on the advantages and disadvantages of this method. The literature review, along with the inventory investigation, laid the basis for the fieldwork that was initiated in November 2022. The aims of the fieldwork are defined as follows:

– Observation and documentation of the present conservation status of the historic properties
– Observation from a vandalism/threat perspective
– Observation from critical analysis of the present condition of historic properties
– Getting an idea about the historic properties from the public
– Interviews/talks/general conversations with the direct and indirect users/stakeholders of the properties
– Photographic documentation of the historic properties

The outcome of this research process is a synthesis of the data that is analysed, interpreted, and compiled in a reasoned and organised way to provide a comprehensive and meaningful account of the subject matter being studied. To maintain the data's integrity, the information used

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[1] The information on Core Data Index Form (CDIF) is extracted from article Naeem (2011) 'Inventory of Historic Places: A Systematic Method for their Identification, Evaluation and Determining Significance Part I: Core Data and Inventory Form', *NED Journal of Research in Architecture and Planning*, 10(1), pp. 1-23. ISSN 1728-7715. The paper explains CDIF as:
 '*The CDIF is designed to capture data that substantially covers various aspects and complexity of historic traditions, and the importance of fragile natural and environmental resources. The theoretical base for developing this is derived from existing international methods and principles of inventory documentation and heritage recording; but in addition, it includes data considered essential for addressing the lack of existing information on historic towns within the context of Pakistan. Core data index form is used for mapping and inventory listing of heritage properties. Based on the international guidelines of ICCOMOS and ICCROM, it has become a primary source and outcome of the research process that has been designed to capture data that substantially covers tangible and intangible aspects, the complexity of the historic traditions and the importance of fragile natural and environmental resources. It was first pilot tested and then applied for inventory documentation of two historic towns in Sindh i.e. Karachi and Shikarpoor. The CDIF has 3 sets of information: usage and physical condition of fabric, architectural or historical merits and socio-economic data on residents/ users/ owners of the listed properties. This additional data is useful for gaining a holistic understanding, necessary to evaluate the degree of change, transformation and the extent of preserved historic character; and also, for formulation of policies and proposals for effective use, management and the maintenance of historic places.*'

Table 1 Three categories of research process along with the list of archives (Developed by author in 2023)

Literature Review	Archival Analysis	Field Work
Consultation of a variety of literary sources such as books, journals, registers, gazetteers, inventories, newspapers, internet blogs, advertisements, documentaries, and recorded interviews and podcasts of experts etc.	Visiting archives to extract data as per the given list of archives below.	To understand the ground realities, the location, and the existing state of conservation of the Quarter by taking notes and recordings on site. Photographic documentation as evidence of the current state of the properties within the quarter. Interviews with users.

List of Archives consulted for the research:
Heritage Cell Department of Architecture and Planning, NED University Karachi
Karachi Municipal Corporation (KMC) Archives
The Heritage Foundation of Pakistan Head Office and Archives
Indus Valley School of Art and Architecture (IVS) – Library
Sindh Archives, Government of Sindh (GoS)
Arif Hasan Urban Resource Centre (URC) - Offices records and archives
Citizens Archives (CAP)
Politecnico Di Milano Library and Archives
Archives 150 (online archive)

Table 2 Historic timeline of the built heritage inventorying system in Karachi (Developed by the author in 2023)

Historic Timeline of the Built Heritage Inventorying System in Karachi 19th–20th Century
1729 *Kolachi* **jo Goth** [Fishing Village – Founded by Baloch tribes under *Talpur* Regime in Sindh in 1729 circa]
1839 **British Annexation [1839]** British Colony under the governorship of Commander Sir Charles James Napier **BRITISH COLONIAL ARCHITECTURE [1839–1947]** Neo-Classical Approach of British in India
1904 **Enactment of 'Ancient Monuments Act (1904)'**
1947 **INDIAN SUBCONTINENT PARTITION** Creation of Pakistan
1961 First ever **listing of Buildings of Architectural & Historic Interest** - developed by Architect Mehdi Ali Mirza, consisting of landmark and civic buildings
1975 **Enactment of 'Antiquities Act (1975)'** The enactment of National Antiquities Act 1975 brought a shift in the process of recognition of heritage buildings
1979 **Heritage Awareness Campaign** by the Karachi Development Authority (KDA), Karachi Municipal Corporation (KMC) and Karachi Building Control Authority (KBCA). Amendment of Town Planning Regulations. 44 historic buildings in various quarters [historic] recognised as un-demolishable assets
1981 **First ever architectural documentation** and inventory of 44 buildings by the Design Bureau Karachi Development Authority (KDA)
1987 Publication of **architectural measured drawings** of 44 buildings by DB-KDA
1994 **Enactment of 'Sindh Cultural Heritage Preservation Act (1994)'**
1997 **Comprehensive inventory of 600 buildings in 15 quarters**, under the publication of **National Register of Historic Places by Heritage Foundation (Heritage Foundation** 1997**)**. 600 buildings declared protected under Sindh Cultural Heritage Preservation Act (1994)
2001 Historic properties including open spaces **were declared protected under Sindh Cultural Heritage Preservation Act (1997)**. Published in Gazette notification, April 25, 2011, in Karachi by the Culture Department Govt of Sindh
2017 [2017-19- Approx.] **1,587 historic properties** including **open spaces** declared protected under Sindh Cultural Heritage Preservation Act (1994)
2021 **1,362 historic properties** [approx.] including open spaces declared protected under Sindh Cultural Heritage Preservation Act (1994)

is accurately attributed to its original sources according to the legal processes followed.

2.1 Understanding the context - introduction to Karachi

The present-day metropolitan city of Karachi is the most populated city in Pakistan, containing over 30% of Sindh and 12% of the country's population (census 2017) (Khan et al. 2022). During the British colonial era, the area that makes up modern-day Pakistan was a part of British India. The Indian subcontinent or British India were the names given to the region while it was under British control from the middle of the 19th century until its independence in 1947. After independence, Pakistan was divided among four provinces: Sindh; Punjab; Northwest Frontier Province, now named Khyber Pakhtunkhwa; and Baluchistan. The city of Karachi, after independence, served as the capital of Pakistan until the establishment of Islamabad as the new and present capital in 1947–1959 (Soomro and Soomro 2018). In addition to British India, the region covered what is now Bangladesh, Nepal, and Sri Lanka, covering almost the entire South Asian region. The British Empire had territories extended over multiple continents, from Asia, Africa, and Australia to North America. Trade (overseas), being the most ancient profession in the region, is the primary revenue-generating sector; approximately 46.5% of the manufacturing

sector is located here. In the Indus Valley (3300 BCE to 1300 BCE), people engaged in commerce with Mesopotamia more than 4000 years ago, as did the Arabs long before the arrival of Islam (Hasan 2022).[2] Refer to Fig. 1 for illustration.

The native town could justifiably be called a settlement of Karachi, in the southeast of present-day Pakistan, and was founded as a fishing village by the local Baloch tribes from Baluchistan (present-day one of 4 provinces of Pakistan) and *Makran* circa 1729. The village was annexed to the *Talpur* Dynasty.[3] (Sumbul 2016; Moore 2018) Later, it grew as a lesser port town, with trading networks across the Arabian Sea with Oman and the Persian Gulf (Baillie 1890; Burton 1877). According to Halstead's "Some Karachi History", it is said that a strong-minded *Jokhio* dame built the defences around the town, which came to be known as *Kalachi Kot* (Hasan 2022). The town was fortified with a mud wall, as shown in Fig. 2 (left). During British colonisation, which marks its inception in Karachi in 1839 via a small battle with the *Talpurs* under the leadership of British Commander Sir Charles Napier, an English town was established next to the native town, as shown in Fig. 2 (right). Several traders were invited to

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[2] Karachi before the British Conquest, 2022- by Arif Hasan, Page no. 70
[3] One of the ruling dynasties in the province of Sindh Pakistan before the British conquest in 1839
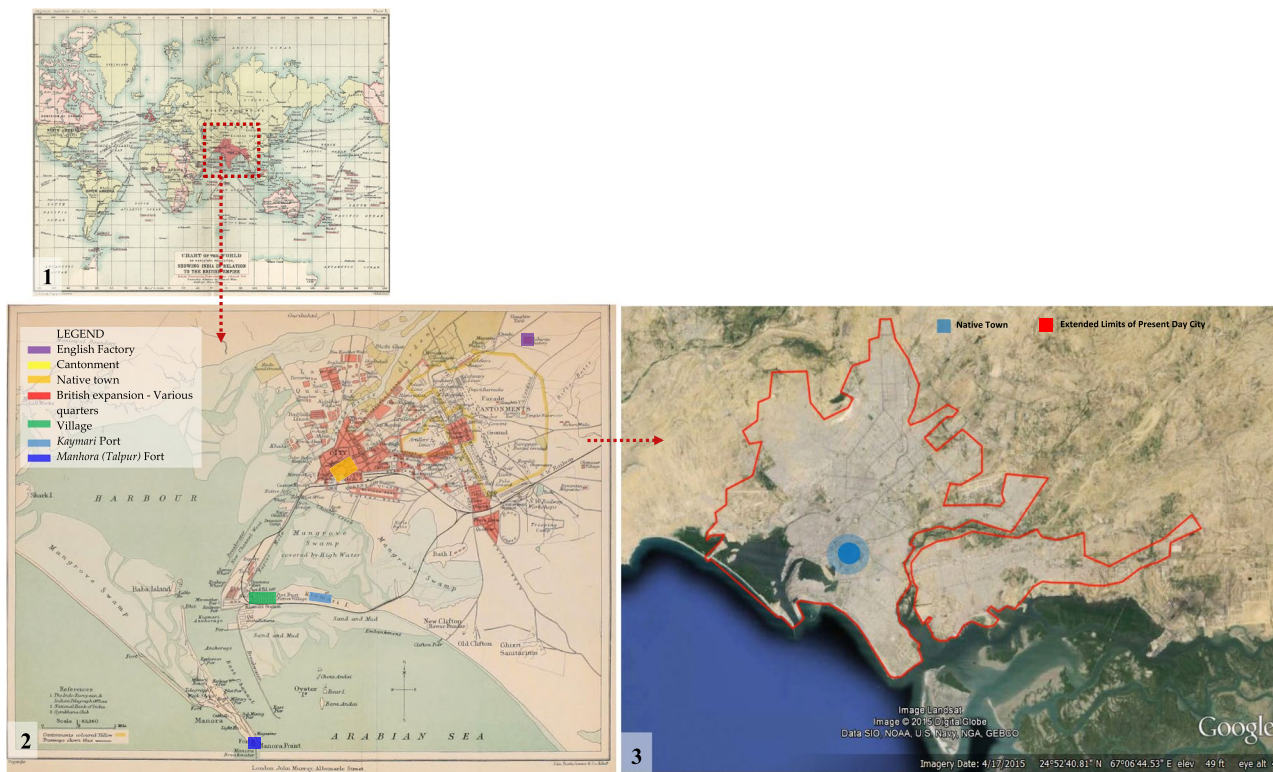
Fig. 1 **1** The British Raj in relation to the British Empire in 1909 (Source: https://en.wikipedia.org/wiki/British_Raj#/media/File:India-or-British-Raj-in-British-Empire-1909.jpg). **2** Map of Karachi demarcated with urban limits by the British Municipality, 1911 (Source: A handbook for travellers in India, Burma and Ceylon by John Murray, https://commons.wikimedia.org/wiki/File:Karachi_map_1911.jpg). **3** Google image showing the expansion of the city of Karachi, 2015 (Source: the author, based on the map from Google Earth)

settle and commerce there, the British East India Company (BEIC) being one of them. The BEIC was established in London in 1600 by a robust financial elite (Levine 2007). It established its foot in India in 1608 in Surat Gujrat (Sohoni 2019) as a trading company and later took over the political control of the land as a coloniser by defeating the Mughals, the rulers at that time, in 1757. In I858, the BEIC was abolished, and a direct imperial rule was declared by proclaiming the occupied territory the British Raj (Metcalf 1984).

The British built a separate settlement next to the native walled city of *Kurrachee*. The map is shown in Fig. 2 (right) and illustrates the boundaries of two distinct towns: Native and English, closely located. The native city was close to the port and consisted of the old pre-British town and its suburbs. It was extraordinarily congested and highly densified, covering every bit of space with narrow streets for manoeuvring (Burton 1877). The British city consisted of the Cantonment, Civil Lines and the Saddar Bazaar quarters (Fig. 1). This part of Karachi

developed as a thinly populated low-rise settlement with wide thoroughfares, green spaces, and few plantations.

Saddar Bazaar, one of the quarters of the British neighbourhood, was created in 1839, immediately after the occupation of Karachi as a competitor to the wholesale markets in the native city (Hasan, Polack, and Sadiq 2008). Sophisticated transportation infrastructure came along with the development. East India Tramways Co. Ltd. was formed in 1902 and steadily replaced horse-driven trams with gas-powered engines (Cheema 2007). The British divided the town into 26 historical quarters, which have outgrown the bounds of the British town and developed in all directions with the construction of new colonies and satellite cities. Today's city is much larger than the one developed by the British. Karachi, at present, is divided into 7 very vast districts, with several towns and union councils (see Official web portal of Karachi Municipal Corporation). The image in Fig. 1 (#3) shows the boundaries of the current city, with the blue circle representing the British town. Currently, the British
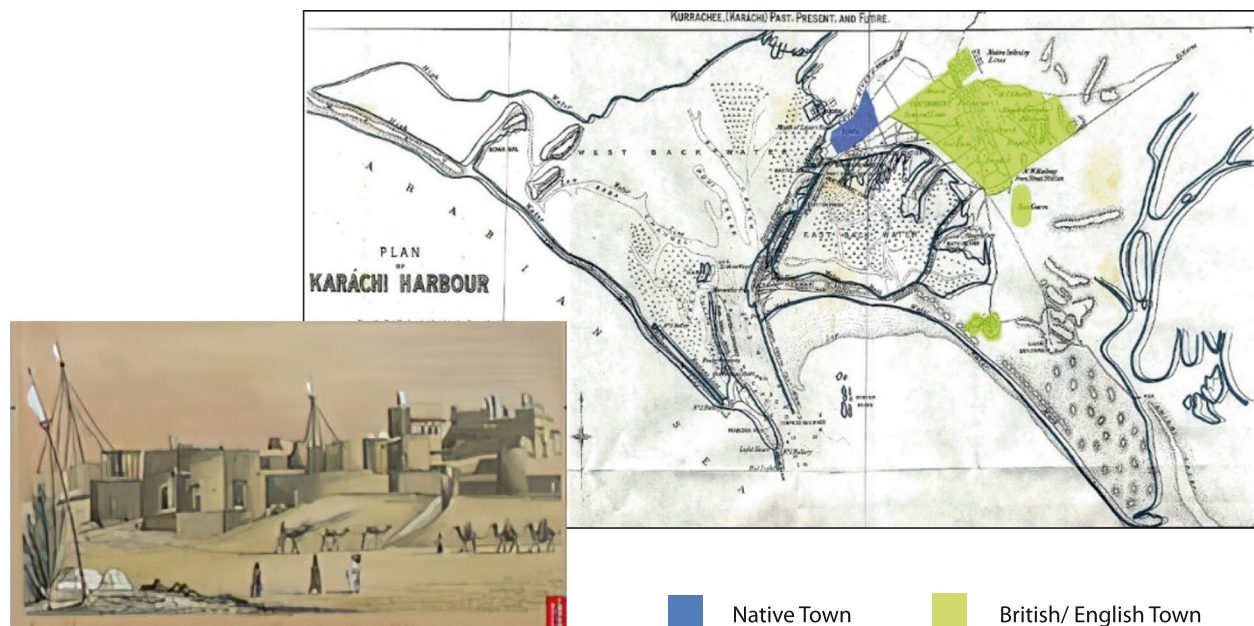
Fig. 2 Left: Watercolor painting of Karachi by Henry Francis Ainslie (1805–1879) titled 'Sindh, part of the native town of Kurrachee', 1851 (Source: https://newslinemagazine.com/magazine/brief-history-karachii). Right: Plan of Karachi harbor from the port Engineer's administrative report (1888–1889), highlighted with native and British towns (Source: Baillie 1890)

town and the natives are regarded as the historic core of the city of Karachi. Thus, this study's primary objective is to evaluate the inventorying procedures utilised to protect the same historic centre of Karachi.

3 Overview of the system of built heritage inventory in Karachi - national account of built heritage inventories in Pakistan

3.1 Earlier listings in the Karachi–built heritage inventory

The process of cataloguing the various parts of Karachi was initiated in British times. The sole purpose of this categorisation was to control the city from the perspective of administration and jurisdiction limits. The British used the term 'Quarter' to describe a parcel of land. Mr. Belasis, a collector of Karachi, established the city's first administrative divisions in 1858, dividing it into 14 quarters (Khuhro and Mooraf 2008; Naeem 2011). Cantonment was not included in the previous division.

Later, Alexander F. Bailie, the municipal engineer, extended the boundaries of the British town along with the native town. He expanded the division and divided the city into 26 quarters, incorporating the already existing 14 quarters (Baillie 1890; Burton 1877; Lari 1996). Each quarter was dedicated to its specific function. For instance, the Artillery Maidan and Cantonment Quarters essentially were the domains of the British army and

contained various buildings obligatory for the army, such as the British Army Officer's Residential Colony, infantry administration, schools, hospitals, churches, canteens, stores, and observatories.

The Saddar Bazaar Quarter was created in 1839 in competition with the wholesale markets in the native town (Hughes 1876; Haroon and Baig 2004). It soon progressed to be a merchandising bazaar explicitly catering to the European inhabitants of Karachi, primarily comprising civil servants and infantry personnel. Soon after, this neighbourhood was adopted as a favourable residing district for Europeanised Indian communities (Hasan, Polack, and Sadiq 2008). By the end of the 19th century, the city had more than one cantonment, and in 1905, five more quarters were added to Karachi's municipality, bringing the total to 31. By 1941, the city had expanded into 44 quarters, which were divided into 8 wards. Presently, the city is administered in 7 districts, as shown in Fig. 3 (Naeem 2011).

The term 'inventory' was adopted relatively late in the context of Karachi. The earlier available catalogues of historic buildings were merely in the form of lists. The first listing of Buildings of Architectural and Historic Interest was developed by Architect Mehdi Ali Mirza (1911–1961) in 1961, consisting of many landmarks and civic buildings (Mankani and Shikoh 2012). The enactment of
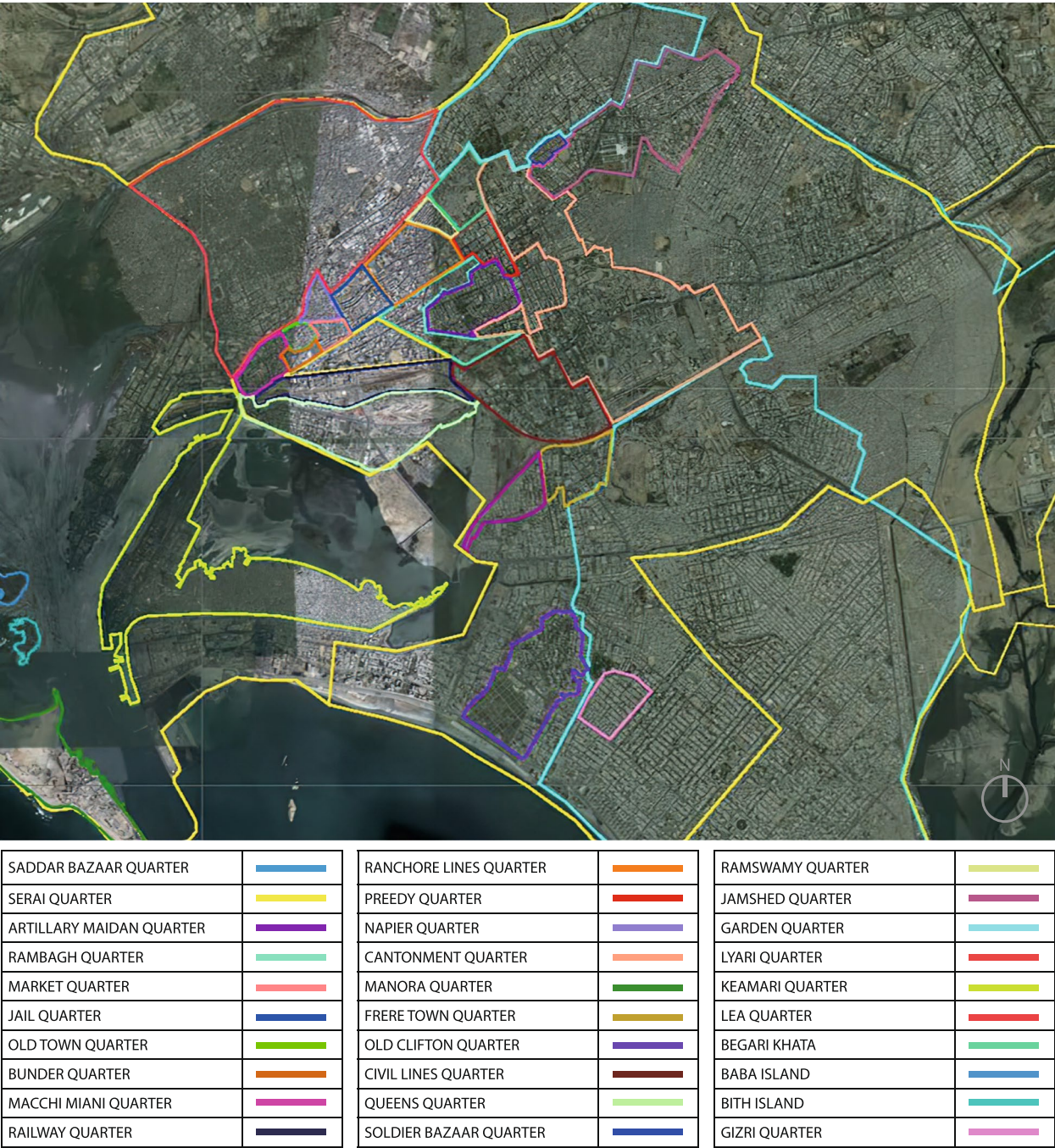
SADDAR BAZAAR QUARTER		RANCHORE LINES QUARTER		RAMSWAMY QUARTER	
SERAI QUARTER		PREEDY QUARTER		JAMSHED QUARTER	
ARTILLARY MAIDAN QUARTER		NAPIER QUARTER		GARDEN QUARTER	
RAMBAGH QUARTER		CANTONMENT QUARTER		LYARI QUARTER	
MARKET QUARTER		MANORA QUARTER		KEAMARI QUARTER	
JAIL QUARTER		FRERE TOWN QUARTER		LEA QUARTER	
OLD TOWN QUARTER		OLD CLIFTON QUARTER		BEGARI KHATA	
BUNDER QUARTER		CIVIL LINES QUARTER		BABA ISLAND	
MACCHI MIANI QUARTER		QUEENS QUARTER		BITH ISLAND	
RAILWAY QUARTER		SOLDIER BAZAAR QUARTER		GIZRI QUARTER	

Fig. 3 The boundaries of historic Quarters of Karachi (Source: base map and data acquired from Heritage Cell – DAPNED University Archive 2023)

the National Antiquities Act of 1975 made a significant shift in recognition the heritage buildings. Based on earlier listings in 1979, the Karachi Development Authority (KDA), Municipal Corporation Karachi (KMC) and Karachi Building Control Authority (KBCA-now Sindh Building Control Authority SBCA) were involved in raising heritage awareness. In this regard, the Town Planning Regulations were amended and promulgated, and 44 historic buildings in various historic quarters were

recognised as un-demolish-able heritage assets.[4] At that time, greater focus was given to the public, civic and amenity buildings that were of outstanding value from both architectural and historical perspectives. Later, the concept of heritage buildings widened, and more local and indigenous architecture that fulfilled the criteria for enlistment was documented. The KDA was instrumental in identifying and developing the list of historically significant structures. Under the direction of Ar. *Zaigham Jaffery*, the Director Design Bureau in KDA, the first architectural documentation and inventory of 44 buildings in Karachi, was completed in 1981. A location map measured architectural documentation, and the drawings were published in the years 1987–1989 as a result of this process.[5]

In 1997, the Heritage Foundation of Pakistan published 'National Register: Historic Places of Pakistan': A compilation of inventories of historically significant structures in 15 historic quarters in 8 thorough volumes (Heritage Foundation 1997). The inventories identified approximately 600 buildings worthy of protection, which were subsequently protected in 1997 under the Sindh Cultural Heritage Preservation Act (1997). Perhaps this was the greatest enlargement in the history of Karachi until 2011. They included all categories of built heritage, including apartment buildings, clubs, hospitals, educational buildings, and water troughs (drinking water fountains). Any structure that was determined to be historic was listed. However, the criteria for the determination of 'historic' for a building remained undefined.

In 2011, a gazette notification released an even longer list of cultural heritage consisting of more than 1200 structures. (Culture, Tourism & Antiquities Department 2011, document acquired from Heritage Cell-DAPNED University January 2023) This time, the inventory was developed using the CDIF, a data collection tool based on scientific heritage building selection criteria developed by HC-DAPNED (Naeem 2011). The CDIF helped publicise the prevailing issues within the quarter, such as decay, drainage and sanitation problems, environmental issues, garbage dumps and uncleanliness of the neighbourhoods and, more interestingly, the overenthusiastic restoration efforts of the community and users of the heritage buildings. It provides pragmatic information with an appropriate description of the state of conservation of heritage buildings, which highlights the urgency of action needed to ensure their survival. The repository developed as the result of this mapping is a multi-layered database that is useful for several functions, such as the study, research, conservation, and management of the heritage ensemble

of the quarter. It also assisted in the official enlistment process of the individual properties and later notification as protected heritage under the Sindh Cultural Heritage Protection Act (1994) (SCHPA 1994) by the Culture Department Government of Sindh (Culture Department). In addition, other departments have created their own inventories.[6] The Culture Department, as the principal authority, uses CDIF as the primary source for inventorying the city's built heritage, using it for the formal enlistment process. Most recently, in this regard, a total of 1362 historic buildings have been protected in various quarters in Karachi as of June 3, 2021.[7] At present, the city is divided into 30 quarters, as shown in Fig. 3. The number of quarters increases with time.

3.2 Inventorying towards the first step of preservation
Due to neglect, lack of maintenance, and inappropriate urban development, several historic buildings in Karachi are in danger of being lost. A built heritage inventory can aid in the documentation of these buildings and structures, as well as the development of preservation and conservation policies. The inventory of the Jail Quarter and many others prepared using the CDIF approach is being utilised as a working document for a periodic check on the buildings by the culture department of the Government of Sindh (KHBRP 2006).[8] A well-functioning inventory process can make it possible for related stakeholders and credible organisations to communicate information effectively (UNESCO, ETF, and CEDEFOP 2023). This approach has assisted in avoiding several illegal demolitions and helped in preventing overenthusiastic restoration attempts.

Karachi has the potential to become a significant destination for cultural and heritage tourism. Well-maintained built heritage can be a substantial lure for tourists, and a source of employment and economic prosperity (Khuhro and Mooraf 2008). A built heritage inventory can aid in identifying and promoting historic structures and buildings as tourist attractions. Karachi is a fast-growing city that requires long-term urban planning and development. A built heritage inventory can assist in guiding development decisions and ensuring that new buildings and structures complement and protect the city's built heritage. An architectural heritage inventory can be utilised to develop better knowledge and appreciation of

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[4] Interview with Ar. *Zaigham Jaffery* (R), former Head, Design Bureau Karachi Development Authority (2014).

[5] Same as note no.09

[6] Marvi Mazhar Associates (MMA) https://www.marvimazhar.com, CUBE EDU-tours https://cubeedutours.com/, Industrial Sites Inventory records (ISIR) by Naveed et al. https://www.mdpi.com/2071-1050/14/10/5797

[7] Gazette Notification by Government of Sindh, Culture Department. 2011. Published by Dawn e-newspaper April 25, 2011. Document acquired from Heritage Cell-DAPNED University January 2023.

[8] To learn more about the inventories of quarters, refer Heritage Cell-DAPNED website at: https://www.neduet.edu.pk/arch_planning/Heritage/webpages/KHI-Enlt-Qtrs.html.

Karachi's history and cultural heritage. This can serve to promote a sense of pride and connection to place among the city's citizens, as well as a stronger sense of community. Overall, a built heritage inventory is a valuable tool for documenting, maintaining, and showcasing Karachi's historic monuments. It can assist in ensuring that these vital cultural assets are conserved and preserved for future generations to enjoy and enhance the city's sustainable development and economic progress.

4 Documentation process of the *Wadhumal Odharam* (Jail) Quarter in Karachi – a case study

The *Wadhumal Odharam* (Jail) Quarter has a unique socioeconomic, cultural, and urban character, which makes it outstanding among the remaining quarters developed by the British. This quarter displays an array of substantial administrative and monumental structures that incorporate large open spaces within their premises. They include the KMC and court buildings, which occupy the former site of a jail, as well as hospitals, schools, dharmshalas (guest houses specific to the religious communities) and several religious buildings. This multidisciplinary nature, together with a multicultural and multi-ethnic community inhabiting the quarter, creates an exceptional multi-layered cultural historic urban landscape. These attributes have had a significant impact on the city's development over time through both their tangible and intangible aspects, making the *Wadhumal Odharam* (Jail) Quarter an ideal case for a thorough study.

4.1 The *Wadhumal Odharam* (Jail) Quarter - historical development and the built heritage inventory

The *Wadhumal Odharam* (Jail) Quarter encircles 27.12 acres and is one of the quarters that houses mega structures existing within large open compounds. It is divided into eight survey sheets. The quarter is named after a councillor in the British Karachi (Municipality) *Wadhumal Odharam.* The Jail is named after the Jail building (1846–1868) that once existed there at the intersection of M.A. Jinnah (Bunder) Road and Jail (*Nanakwara*) Road, presently called *Wadhumal Odharam* (*Nanakwara*) Road (Lari and Lari 2001). The old jail building was gutted when the new jail building was built in 1906 at another location, leaving the land for several government buildings, including the KMC Building, City and Small Causes Courts Buildings (Fig. 4). The typology of the urban fabric of the quarter suggests that it developed as an institutional pocket for the city with the establishment of various civic amenity buildings and housed several significant government and nongovernmental buildings.

4.2 The quarter's built heritage inventory mapping - characterisation of the tangible attributes

As per the built heritage inventory mapping of the *Wadhumal Odharam* (Jail) Quarter, a collection, analysis, and visualisation of data related to the physical structures and spaces that make up urban and rural areas was carried out. This primarily involved historic structures as well as older urban features such as parks, bridges, and street designs. In this context, the tangible attributes are referred to as the architectural elements, materials of construction and techniques, and ornamentation styles based on the colour, texture, and other physical characteristics that are identified through mapping within the quarter. However, for this specific research, only historic structures were the focus of the study. The process of characterising the tangible attributes of the cultural heritage in the quarter helped in assessing the overall condition and significance of the built heritage and is discussed in detail in the section of 'finding and discussion'.

The quarter has a mixed functional typology, predominantly having commercial activity on the ground floor, with 89% of the historic buildings having shops and other commercial establishments. Seventy-eight percent of the buildings have residential activity on the upper floors, which is the most significant percentage of this specific function in comparison with other functions. Only 12% are commercial, while the rest are vacant or occupied for other reasons. The mapping of the quarter shows 136 items in total, comprising 135 historic structures and 1 open space.

5 Findings and discussion - critical analysis of the case study

5.1 Building typology and the architectural manifestation

The building typologies identified through the inventory system are based on a variety of structures. The KMC (1921) is situated at the junction of the main M. A. Jinnah (Bunder) and Ali Dina Ali Mohammad Roads; next to it is the Small Causes Court (1922) at the junction of M. A. Jinnah (Bunder) and *Wadhumal Odharam (Nanakwara)* Roads, and City Court (early 20th century) on *Wadhumal Oodharam (Nanakwara)* Road, which are some of the landmark buildings of the quarter, representing unique craftsmanship and outstanding architectural attributes (Fig. 4).

Throughout, the quarter the standard British Indo-Saracenic design language based on profound cultural symbolism is used. The linear façades having strict symmetrical proportions with the decorative touch of clock towers or a central pinnacle are strong reflections of the fulfilment of the British nostalgic desire. In addition to

Fig. 4 Map of *Wadhumal Odharam* (Jail) Quarter showing the listed properties extracted through CDIF. **1** Nigar Cinema; **2** Mulla Jafferjee Kandawalla Building; **3** Jehangir Kothari Building built in1804; **4** Old image of Jehangir Kothari Building in 1930; **5** Raishami Building; **6** Christ Church built in 1857; **7** Edulji Dinshaw Building, Lady Dufferin Hospital built in 1898; **8** Faiz-e-Hussaini Building; **9** Karachi Municipal Corporation Building (KMC) 1846–1868; **10** Old image of Karachi Municipal Corporation Building (KMC); **11** Small Causes Court built in 1922; **12** Old Image of Small Causes Court. (Source: 1–3, 5–9 provided by HC-DAPNED; 4, 10, 12 provided by Archives 150; 11 from Hasan 1999; the map provided by Heritage Cell – DAPNED University Archive 2018, developed by the author in 2023)

the government-based architecture, the Jail Quarter is also rich in educational establishments. *Lady Dufferin* Hospital *Edulji Dinshaw* Building (1894–1898) and *Lady Dufferin* Hospital *Bai Virbaijee Katrak* Maternity Wing (1916) situated on *Baba-e-Urdu* (Mission) road are the two main health centres that cater to the community.

Apart from that, most prominently, the *Hundaldas Manumal* Building (1938), Bhatia *Bhuwani* Building/ Naveed Manzil (1931), *Abduhusen Karimjee* Marvi Waqf Building (1945), and Mohammadi Manzil (1935) are well known for their significant architectural details. These structures have external architectural features and

engravings done in lime mortar and hanging balconies either in stone or wrought iron grills supported on RCC platforms. The primary aspiration of architectural style is Palladianism because of the massive and very imposing structures (Bremner 2016). The only existing open space is *Nanakwara* Garden (Family Park) on James Terrace Road. The presence of Christ Church (1856) on *Baba-e-Urdu* (Mission) Road and *Nishtar* (Lawrence) Road, Adam Masjid/mosque on *Wadhumal Odharam* (*Nanakwara*) Road and a Temple (in the opposite quarter) demonstrate the multi-ethnic, cultural, and religious populace coexisting within the quarter. Altogether, they created a significant impact on the sociocultural aspect of the quarter (Hasan 1999).

Most of the population (pre- and post-Indian Subcontinent partition in 1947) was and continues to be associated with the field of trade and finance. Thus, the chief commercial activity within the quarter has continually been trading; therefore, there are numerous markets, such as *Kaghaz Bazaar* (Paper market); the Chemical Market; the Grain Market, locally called the *Dhaan Mandi*; the Electrical Appliances Market; Karachi's most prominent *Paan Mandi* (Betel Leave Market); and a market of second-hand goods ranging from shoes to carpets (Cheema 2007). The arrangement of a variety of amenities within the quarter itself reflects self-sustaining planning.

5.2 Present conservation status

Data extracted through the inventory process of the Quarter specifies only 6 buildings in a well-maintained manner, which marks 100% of state-owned properties, having a homogenous outer appearance and the original façade primarily maintained. The reason might be that these building are government owned, providing monetary support for maintenance/restoration of the building. In total, 119 historic buildings, 88% of the total number, have a public-owned status and remain in a partly maintained state. A detailed breakdown of the quantities is given in Table 3.

Table 3 Table showing heritage building statistic within *Wadhumal Odharam* (Jail) Quarter (Developed by the author 2022—Data acquired via application of CDIF a survey conducted by Heritage Cell – DAPNED University Archive 2021)

No	Title	Statistics	Percentage
1	Well-maintained listed properties	6	5%
2	Partly maintained listed properties	119	88%
3	Highly dilapidated listed properties	1	0.5%
4	Façades only listed properties	1	0.5%
5	Partly demolished listed properties	9	6%
6	Demolished listed properties	9	-

As far as the economic benefits for maintenance/restoration are concerned, the government cannot provide in the case of private ownership. This category of buildings is intact, but the maintenance is not correctly done, eventually resulting in a bad state of the property. The rigid enlistment system and lack of expertise in the field prevent owners from doing much with their buildings. In most cases from this category, the façades are defaced by adding oversized hoardings or sign boards. Alterations are carried out without any plan, which results in an erratic outer (and internal) appearance of the buildings.

The survey further identified 9 buildings in a partly demolished state, and 1 has a highly dilapidated 'façade only' status. Nine buildings that acquired enlisted heritage status have been demolished and replaced with newer structures. A list of buildings showing these various categories of present status is shown in Table 4.

5.2.1 List of buildings showing 5 categories of present status

5.3 Rental/system of tenancy

The occupancy pattern ranges from owned, *pugree*, vacant to rented properties. As per the survey, 52% of the buildings are occupied by tenants, and the remaining 25% are occupied by their respective owners. Twenty-two percent of the buildings are occupied by the '*pugree*' system. The remaining buildings are vacant, in a highly dilapidated state or have been demolished. *Pugree* is an archaic informal rental system where the specific property is chartered for a minimum of 100 years with a large amount at the beginning as rental changes and a minimum rental amount (less than 100 rupees) per month (Soomro and Soomro 2018).

This rental system/agreement has a very adverse effect on the properties, as it offers the bare minimum economic support to the owner. The primary victim of this system is the property, as the owner is found to have little interest in maintaining the property, whereas the tenants treat it as merely rented property. However, the percentage of buildings occupied on *pugree* in the Jail Quarter is very low, yet it aids substantially in the dilapidated state of maintenance of heritage buildings. Formerly, three cinemas, namely, *Nigar*, Ritz and Light House cinema, functioned at the same time. Presently, only *Nigar* cinema is in operation, and the other two were gutted and replaced by high-rise plazas.

5.4 Potential threats to the historic-built fabric

Potential threats to the built heritage are another crucial factor that may be understood through the inventorying method. The built heritage in the quarter faces several threats ranging from men-made to natural hazards. Both

Table 4 Table showing pictorial representation of the conservation status of the heritage buildings (developed by the author in 2022, using CDIF a survey conducted by Heritage Cell – DAPNED University Archive 2014)

No	Title	Status	Detail
	Well-maintained 	**Karachi Municipal Corporation (KMC) Building** Well maintained. 5% of the total of 136	DoC: 1846-68 Enlistment No. 1997-143 Address: WO- 7/37, M.A. Jinnah (Bunder) Road Designed by Ar. James Strachan Architectural features: Clock tower, balconies, columns, arches, dome, pilasters, courtyard, decorative entrance portal
	Partly maintained 	**Makhan Building** Partly Maintained. 88% of the total of 136	DoC: Mid 19th C Enlistment No. 1997-162 Address: WO-1/16, 17, *Washumal Odharam (Nanakwara)* Road Architectural features: Arched windows, roundels, cornices, mouldings, pilasters, decorated parapet, symmetrical design
	Façade only 	**Captain & Co. Building** Façade only. 01% of the total of 136	DoC: Mid 19th C Enlistment No. 1997-148 Address: WO-7/13, Shahrah-e-Altaf Hussain (Napier) Road Architectural features: Cornices, Festoons, Ornamented timber pelvet and, pitched roof, carved waterspouts, pilasters, decorated parapet
	Partly demolished 	*Auqaf* **Building** Partly demolished. 6% of the total of 136	DoC: Mid 19th C Enlistment No. 1997-163 Address: WO-2/6, Hari *Dodani* Lane, off *Washumal Odharam (Nanakwara)* Road Architectural features: Arched windows, roundels, cornices, pilasters, decorated parapet
	Demolished 	*Shiroomal Shewakram* **Building** Demolished	DoC: Mid 19th C Enlistment No. 1997-164 Address: WO-2/10, Hari *Dodani* Lane, off Nishtar (Lawrence) Road Architectural features: Arched windows, cornices/mouldings, pilasters.

categories of threats are consistently impactful in terms of their magnitude.

The colonial buildings in the quarter are built using stone as the primary building material in a fair-face manner (Ovais 2022). There are several overenthusiastic restoration measures observed within the quarter, including the application of enamel paints and cement plasters instead of conservation-friendly and sustainable materials. This lack of expertise to deal with specific material results in a bad state of heritage (Soomro et al. 2018).

Moreover, the variety of populations residing within the quarter has shifted due to the migration of people from the historic centre to the new emerging colonies and satellite towns on the fringes of Karachi, leaving the heritage buildings vacant. Many of the residential buildings are now converted into go-down storage because of the development of wholesale markets there. This has created an adverse effect on the heritage status of the area. The ever-increasing number of households with the fewest economic incentives is another crucial factor adding to the adverse effect on buildings. Buildings undergo unexpected changes to fulfil the needs of residents, such as creating partitions within a larger space, closing openings such as windows, incorporating storage spaces or even bathrooms in balconies, and adding masses on roofs/terraces. This puts existing drainage and sanitation systems under enormous pressure, and they hardly endure when the situation worsens, especially in the rainy season. In terms of urban infrastructure, the quarter still requires better initiatives regarding traffic issues. The road network is spacious but half invaded by parked vehicles, giving a look of total congestion with heavy traffic jams for vehicular and pedestrian movement.

5.5 Inappropriate implications of heritage legislation

The upgrading of the building bylaws further prevents the dilapidated state of heritage properties not only within the Jail quarter but also in the remaining quarters. An increase in the building height and the floor area ratio (FAR)[9] (Zaka 2015) has encouraged the practice of constructing high-rise plazas to replace the old structures in historic neighbourhoods.

Together with the visual pollution caused by signboards and electrical wiring that has exceptionally extended throughout the historic centre of Karachi, the

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[9] In the 1970s, the Karachi Building Control Authority (KBCA), now Sindh Building Control Authority (SBCA) upgraded its building bylaws and regulation for the entire city. The floor area ratios (FARs) were increased in the historic neighbourhood as well. With updated FAR, building could be as high as the G + 12 level, where they were previously restricted to G + 5 (maximum). Much of the roads were included in road widening schemes. This started a new wave of building demolition. This threat of demolition of the historic urban fabric of the city resulted in initiation of the enlistment process by the government of Sindh Government of Sindh (GoS).

effects of commercialisation have also contributed to the growing tendency of vertical growth in spaces otherwise predominantly planned as horizontal mass (Shakir 2010). High-rise buildings not only lessen the neighbourhood's historic appeal but also have an impact on other aspects of the urban environment, such as traffic flow, pedestrian safety, and public access to public areas. The cultural and historical significance of these properties has been significantly eroded because of this behaviour.

Furthermore, the development of high-rise buildings relies on contemporary building methods and materials, which might not be compatible with the historic materials and the subsequent preservation of the nearby historic properties. Thus, the impact of the upgrading of building bylaws has led to the loss of cultural identity and historic significance.

6 Reflection and analysis

The CDIF method is a critical tool for inventorying and assessing the cultural heritage of Karachi. It provides a comprehensive understanding of the built heritage typologies and their status, helping in preservation and management strategies. However, there are some gaps in the process that need to be addressed. One such gap is the lack of information on the community or the user, who are the direct stakeholders or owners of the heritage properties. Community engagement is crucial for preserving and promoting heritage, as it helps build a sense of ownership and responsibility. Without this engagement, there is a risk that heritage properties may be neglected or even destroyed.

The case of Karachi stresses an evident lack of ownership in certain instances. Individuals who own or rent these properties (refer to the '*pugree* rental system' in detail in Section 5.3) reflect a constant resistance against taking ownership of structures that were either built during the British era or immediately after the 1947 independence (heavily influenced by the British). However, the impact of these structures is merely acknowledged if they provide economic benefits in terms of their use value. This may be seen in the fact that many historic buildings in the jail quarter have commercial activity on the ground floor, while go-downs serve as storage on the floors above. This neglect is caused by numerous variables that should further be investigated such as:

- The current rental structures
- Religious convictions, since some people associate these structures with non-Muslims
- Lack of knowledge regarding the historical importance of these structures
- Insufficient economic incentives provided by the government.

To address this gap, it is important to plan for incentives that benefit users, the community, or any direct stakeholder rather than just focusing on heritage conservation. These incentives can help encourage individuals to take an active role in the preservation of their heritage properties. For instance, incentives could be in the form of tax credits or subsidies for building maintenance or grants for community-led conservation projects. It is also important to note that community engagement may not always be motivated by only heritage perspectives. Instead, the incentives must be carefully crafted to meet the needs and interests of the community, such as by trusting their opinion, motivating them to invest/business, and giving them economic independence through heritage ownership.

Moreover, the inventorying procedure greatly aided the enlistment of the historic properties in the quarter under the SCHPA Act 1994. This legislation was passed to preserve and protect the cultural heritage monuments and structures in the Pakistani province of Sindh. The quarter was first enlisted in 1997 and later extended from 2011 until 2021. As a result of its protected status, the quarter was sheltered from illegal demolitions. However, despite legal protection, various forms of vandalism continued. Some historical structures, for example, were/are defiled with graffiti or damaged by natural elements, while others have been unlawfully occupied or utilised for reasons other than the preservation of cultural assets. The gaps in the law resulted in the absence of guidelines on preservation. A lack of balanced intervention on historic properties, and preventive conservation measures addressing the protection process, remains merely a written document (Akbar, Iqbal, and Van Cleempoel 2023).

The search for better economic returns has increased the need for commercialisation, resulting in most of the historic areas being encroached upon with several new additions, depending upon the rate of need and requirements. Moreover, due to the functional shift from mixed-use to purely commercial, buildings that once were used as residences are now either shops or warehouses. The degree of such evolution (change in usage) is observed in most areas of the Jail Quarter. It is not incorrect to say that the entire historic centre of the city, with all its historic quarters and its historic fabric, is subjected to similar kinds of challenges. By looking at the aspects discussed above, the potential reason for the deprived state of conservation of Karachi's architectural heritage can be summarised as follows:

– Lack of a sense of ownership: being very English in appearance, a lack of belonging/proprietorship, a lack of awareness regarding heritage significance

– Population growth: increasing family size, rural-urban migration, economic immigrants.
– Lack of economic incentives: negligible gain in reduced annual property taxes, no reduction in utility bills, no monetary maintenance support by the Government of Sindh (GoS), etc.
– Low affordability: high opportunity cost, pressure on infrastructure
– Political and legal reasons: minimal penalty on illicit demolition, insufficient level of enlistment and monitoring directions from the Government of Sindh (GoS)
– Lack of expertise: lack of professionals in the field, lack of knowledge on the subject, overenthusiastic conservation attempts
– Technological aspects: difficult to maintain, lack of modern technology used in the field, conflict of new versus old/vintage.
– Poor planning: planning is often overlooked regarding the conservation of Karachi's historic urban fabric. The challenges of integrated urban planning are frequently disregarded, leading to a fragmented approach to conservation efforts.

7 Conclusion– a way forwards

The study of the built heritage inventory in Karachi carried out for this research elaborates on the various approaches followed to inventory Karachi's cultural heritage, with the CDIF method being the most comprehensive. The application of CDIF on the *Wadhumal Odharam* (Jail) Quarter confers the city's historic ensemble's ability to survive. The findings show that two of the 6 categories of the built heritage typologies, well-maintained and partly maintained, vary only slightly in architectural style. The primary aspect that distinguishes them in terms of the current state of conservation is their ownership status. State-owned or government buildings, which receive financial support for maintenance, generally have uniform exteriors. In contrast, privately owned assets that are only partly maintained often lack government assistance and may have more varied exteriors. The bias between state-owned and privately owned buildings has a significant impact on conservation efforts, as there are more privately owned buildings than state-owned ones. The limitation of this finding is the lack of economic/monetary incentives for owners to invest in conservation. To address this issue, it is essential to provide financial incentives for the maintenance and upkeep of privately owned heritage properties. This can be achieved by offering monetary benefits to private property owners, which can help ensure the well-being of these buildings and preserve their cultural and historical significance. Ultimately, a balanced approach is needed to ensure the

preservation of all heritage properties, regardless of ownership status. By offering support to both state-owned and privately owned buildings, it is possible to maintain a balanced and rich cultural heritage for future generations to appreciate and enjoy.

The current state of conservation within the Quarter differs from its original state; it is similar to the remaining historic quarters in the city, as they all evolved collectively over time. Therefore, the findings of the Quarter's survey can be interpreted as representation of the entire historic core of the city, comprising various historic quarters. To date, no significant urban area conservation initiatives have been taken by the government, and conservation continues to remain monument-centric. However, using the comprehensive inventory of the built heritage that exists, it is possible to shortlist the priority areas for conservation measures with effective urban planning and city management. By considering both the historic clusters and the modern built-up regions, planners and decision-makers may implement efficient plans and strategies to suit the demands of the population and encourage sustainable growth.

Finally, the recognition and documentation of historical structures under the CDIF inventorying process helped in their enactment under the SCHP Act 1994. While the CDIF method provided a valuable framework for understanding Karachi's cultural heritage, it is crucial to address the persistent gaps within the process, such as the lack of community engagement. By planning for incentives that benefit the community as a whole and could also provide economic, social, and cultural benefits through heritage conservation, such as increased tourism or improved quality of life, it is possible to encourage greater participation in heritage conservation efforts and ensure the preservation of Karachi's rich cultural heritage for future generations.

7.1 Limitations of the study

While conducting this research, which is based on an examination of the inventorying procedures used to ensure the preservation of Karachi's historic centre, it was crucial to recognise and deal with a few restrictions to maintain the study's objectivity and validity. The primary obstacle encountered during this study was the insufficiency of comprehensive data on heritage buildings within existing data repositories, such as archives and libraries. Typically, in the Jail Quarter, several protected heritage buildings lack comprehensive historical records, posing a significant challenge. Moreover, the inaccessibility of some heritage buildings in the Quarter due to private ownership made it difficult to gather detailed information on their interiors, historical significance, and current state

of conservation. Time and budget constraints were also significant issues faced during the research. Due to stakeholders' limited participation, the study may not fully represent their opinions concerning the preservation of built heritage. Despite all challenges, this research is unique, as it provides an effectively summarised account of the understanding of the various processes employed in creating inventories of heritage buildings in Karachi. It has high potential to serve as a valuable resource for future research endeavours and government policy-making initiatives. The critical analysis carried out for the case study of the Jail Quarter could serve as a tool to understand and develop a 'building and ground reality challenges-manual' by the culture department as custodians of the historic centre of Karachi for the preservation, conservation, and sustainable management of heritage buildings. The study, if extended to a stakeholders' analysis, would be valuable for interpreting the cultural sensitivities and social complexities of the Quarter.

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