

EVALUATING CULTURAL HERITAGE LANDSCAPE DESIGN AS AN APPROACH FOR AL BUJAIRI PARK DEVELOPMENT, SAUDI ARABIA

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ABSTRACT

The paper introduces the evaluations process of Al Bujairi according to cultural heritage landscape design (CHLD) principles where heritage features of value are most often found. Consequently, Al Bujairi CHLD has been adapted as an evaluation approach to identify the uniqueness of the landscape and heritage features in addition to recognizing its relation to the community. As a result of globalization and urbanization all over the Kingdom of Saudi Arabia, there are incremental alterations in the city patterns effect on the characters of cities' identity. Identity is a vital dimension of social and cultural life in urban areas that strongly enhances people's sense of belonging. The research aims to study CHLD approach and its principles through the evaluations process of Al Bujairi to answer the question; is CHLD helping to maintain the continuity of urban open spaces identity and enhance the users' sense of belonging? To answer this question, this paper is based on two approaches: theoretical and analytical study. Theoretical background reviews the literature related to CHLD, place identity, place constructs and CHLD principles, on the other hand, the analytical side analyzes and evaluates Al Bujairi as a case study area. The case study area, written in Al Bujairi project (Saudi Arabia) to investigate the development of landscape design and human identity through analysis of the different phases of (past condition: the 2015 phase, and 2022 development phase). The study of Al Bujairi landscape design has been implemented the CHLD approach which reflects cultural characteristics. This approach is inspired by Najdi architectural style that emphasize people sense of belonging through intimate environment.

Keywords: cultural heritage landscape design (CHLD), place identity, CHLD principles, Najdi-style, Al Bujairi, Diriyah Gate, Riyadh City.

1 INTRODUCTION

Berque said: "the landscape is a social fact, a natural, subjective and objective, material and cultural product that is real and symbolic" [1]. Cultural heritage landscape design (CHLD) is a way of preserving the identity of a community by reflecting its identity and heritage on its urban open spaces, which reinforce the connecting link with the territory, and a growing appreciation for heritage. Riyadh city by the end of the last century faced a rapid and dramatic increase in a huge leap in architecture industry as well as urban population. The Kingdom of Saudi Arabia is considered as the third-largest Arab country in terms of its land area that has a population of 35,552,251 in 2021 with 2.4% average annual population growth rate [2]. The movement of people over the last 40 years, to cities has a noteworthy urban expansion and rapid population growth [3]. For instance, 83.33% of Saudi Arabia's population live in urban areas, meaning that there are several sizable cities. The capital, Riyadh, is the largest by over 2 million people with a population of 6,506,700 [4].

This paper is based on two approaches, theoretical, and analytical study. The theoretical study tends to identify the CHLD meaning, then CHLD principles, place identity and place constructs. This is followed by an applied study of Al Bujairi in Riyadh Saudi Arabia and analyzed its three phases in terms of its application to the CHLD principles. Then the paper concludes the most important recommendations to develop other urban open spaces to achieve place identity and enhance users' sense of belonging.



2 RESEARCH PROBLEM

Al Bujairi is a vital historical and heritage landmark to Riyadh city. Al Bujairi since 2015 has evolved through multi developments in a very short period that might threaten the cultural and heritage value of the district. Therefore, it is an inquisitiveness to analyze and evaluate the different phases (past condition: the 2015 phase, and 2022 development phase)

3 RESEARCH AIM

This study aims to evaluate Al Bujairi development phases in order to conclude what are the lessons to be learned from each evolving. Thus, exploit this case as an example that preserve the continuity of Saudi urban open spaces identity and enhance users' sense of belonging.

4 RESEARCH QUESTIONS

- Does using CHLD will shape urban open space identity and enhance the relationship between people and their own environment to promote their sense of belonging?
- Was it necessary for Al Bujairi development to come through all these stages to reflect Najdi style and place identity?
- What is the difference between the three phases and how to learn from this case development process to preserve other projects for the future?

5 CHLD MEANING

Landscape is an area that perceived by users' interaction with nature that incubated its identity [5]. The concept of landscape is completed with scientific and historical references which express observably through the integration between nature, technology, and people culture. It is continuously changing, its dynamics, and the history is the witness [6]. Therefore, the aesthetic value of the landscape must be added to these observations based on cultural values [1].

Cultural heritage landscape means a defined geographical area of heritage value which has been shaped by human activities. Such an area is valued by a people and the understanding of the history of a community or place [7]. According to Pungetti and Makhzoumi [8], the subject of CHLD, is defined, mainly, as physical, and geographical aspects; moreover, it is possible to consider the relationship between landscape, place, culture, and society to express and conditions cultural attitudes and activities. This definition, emphasises the "sense of place" in landscape which is affected by social attitudes changes.

The difference between natural and cultural heritage landscape is that natural landscape refers to the physical landscape that effects landform, water, soil, and vegetation, while cultural heritage landscape signifies humanized landscape, which is made by society [8]. On the other hand, it reflects how people modifies their environment from the natural state to the manmade that can be defined as an association of forms, both physical and cultural to convey the meaning of place from people to people [9].

CHLD must become an element of continuity inside the city, providing historical and cultural continuity, the continuity of the natural element and ensuring the aesthetic urban values. As a result, CHLD offers a complex context, with strong inclusion on the social, cultural, and historical environment. Moreover, it can become the continuity element which can reinforce spatial continuity, the dialogue between the old and the new and between tradition and modernity [1].

6 CHLD PRINCIPLES

UNESCO is the first worldwide agency to deal with landscapes internationally, it recognizes that Cultural landscapes reflect spiritual relation between people and nature. Cultural



landscapes serve as a living testimony to the evolution of human societies as a result of diverse human–nature interactions. The protection of cultural landscapes supports and maintains biological and cultural diversity, which in turn promote the quality of life and wellbeing of people.

Some cultural landscapes are counted as a sacred in places where people have significant cultural, religious, and historical combination with their natural surroundings. Three main categories of cultural landscape design are defined in Annex 3 of the Operational Guidelines for the implementation of the World Heritage Convention (UNESCO 2017) [10] (Table 1).

Table 1: Three categories of cultural landscapes and the cultural criteria of outstanding universal value [10].

Criteria of the cultural landscape design	Categories of cultural landscape design
Masterpiece designed landscapes	Designed landscapes
Interchange of human values	Organically evolved landscapes Living and/or relict cultural landscapes
Exceptional testimony to a cultural tradition or to a civilization	
Type of building or architectural or technological ensemble or landscape	
Traditional human settlement, land-use, or sea-use	
Associated with events or living traditions, with ideas, or with beliefs, with artistic and literary work	Associative cultural landscapes

Within CHLD elements may have historical or botanical significance that associated with a historic figure or event to be part of a notable landscape design. For instance, plant may be an uncommon cultivar, exceptional in size, age, rare and commercially unavailable and if such plants are lost, there would be a loss of historic integrity and biological diversity of the CHLD criteria [11]. Historic identity evidenced by the survival of physical characteristics from the site. Thus, the reversibility and/or compatibility of major changes should be considered both individually, and in the context of the overall landscape [12]. The following principles to assess landscapes for inclusion in the case of identifying CHLD need only meet one of the criteria to be included in the inventory (Table 2).

7 PLACE IDENTITY

Place identity is a vital dimension of social and cultural life in urban open spaces. The continuity of place identity is strongly linked to place attachment and sense of belonging. In the field of urban design, the concept of place identity was introduced by Kevin Lynch as being the qualities which provides place's individuality or distinction from other places and serves as the basis for its recognition as a separable entity. Thus, identity of a place is more than just the physical appearance, but also involves a "meaning" for the individual and the community [13].

On the other hand, the term "landscape identity" is used by Stobbelaar and Pedroli [14] to be defined as the interaction between physical environment and social factors. In addition, in environmental psychology, people intrinsically seek to a sense of belonging to a place. Place attachment and sense of belonging are fundamental to establish an emotional and cognitive



Table 2: CHLD principles [7].

Landscape environment	Built environment
• Scenic and visual quality • Natural environment • Horticultural interest • Landscape design, type, and technological interest	• Consistent early environs (pre 1900s) • Consistent scale of built features • Unique architectural features/buildings • Designed structures • Aesthetic or visual quality
Historical association	Other
• Illustrates style, trend, or pattern • Direct association with important person or event • Illustrates an important phase in social or physical development • Illustrates work of an important designer	• Historical or archaeological interest • Outstanding features/interest • Significant ecological interest • Landmark

bond with a place that leads to the feeling of security and sense of community. The cognitions can be organized into two types of clusters; one type consisting of memories, thoughts, values, and settings, and the second type of cluster is the relationship among different settings (home, school, neighborhood) [15].

The information and technology revolution led to discontinuity and change, having an incomparably higher impact than any previous technological revolution, because it manifested itself on a global scale, being indifferent to geographical, economical, historical, or cultural barriers. The information era offers an unprecedented opportunity for cultural development by promoting local values and initiating regional developing programs starting from this objective [16].

8 PLACE CONSTRUCTS

First, discussing the concept of “place constructs”, the term “place” will be first explained. It is also necessary to clarify the difference between “place” and “space”. According to Aly [17], and a wide range of fields (psychology, geography, sociology, anthropology, architecture, urban design, and planning) all discussed that places are spaces with meaning conducted from people’s experiences. Otherwise, place can bring a sense of home and attachment into a space when we identify with it and define ourselves through it [18].

It is what place becomes when meanings, and values of the unique gathering of things are fulfilled [19]. Consequently, these places are where the individual or group has not knowledge but feel at home or have some affectionate feelings towards. In conclusion, Harrison and Dourish [20] define this relation as: “A real place is a particular space which is overlaid with meaning by individuals or group”. Which has been expressed succinctly as (place = space + meaning) (Fig. 1).

According to the previous discussion of “place”, it is obvious that a place can be defined through a harmonious balance between tangible and intangible components. Canter [21], Reply [22], Montgomery [23], and Falahat [24] illustrated that there are three main components of place; physical setting, activity and meaning, as shown in Fig. 2.

The three main constructs of place are physical setting, which is the structure of a place including buildings, landscape, climate, and aesthetical quality. Second, is the activity that is concerned with how people and place interact? The last component is meaning, which is the result of human experience in a place as reaction to the physical setting and activity of place.



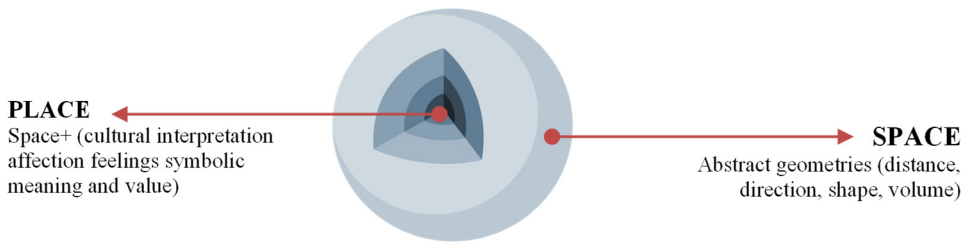


Figure 1: The relation between space and place.

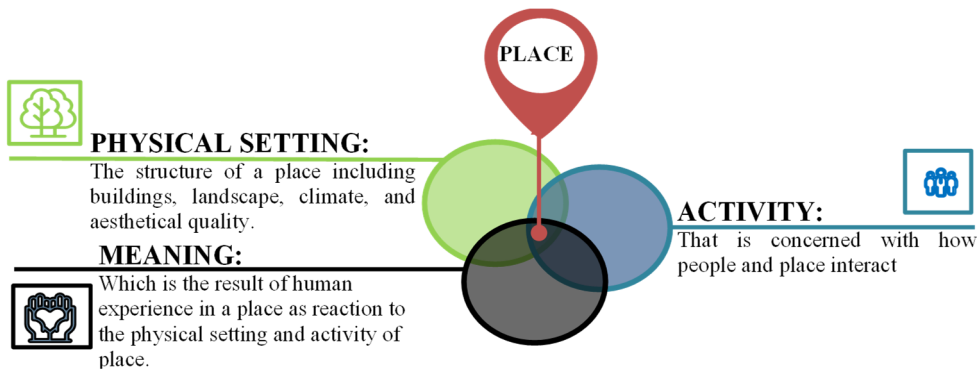


Figure 2: Canter's model of place.

9 RIYADH POPULATION AND 2030 VISION

One of Saudi government's Vision 2030 objectives is to enhance the urban landscape in Saudi cities through various projects and initiatives. One of these projects is Al Bujairi Development which is designed by Atkins, a member of the SNC-Lavalin Group as Consultant and Diriyah Gate Development Authority as Developer and the Quality-of-Life Program, which aims to create a livable environment that promotes all citizens lives, encouraging their interaction in various cultural, recreational, and sporting activities [25], [26] (Fig. 3).

On the other hand, the project aims to flourish economy through growth and diversification and a vibrant society by strengthening national identity and promoting a higher quality of life. In addition, Saudi Green Initiatives (SGI) aims to protect future generations by expanding green areas and preserving the current ones. It improves air quality, reduce sandstorms, combat desertification, lower temperatures in surrounding areas, combating climate change [27].

10 AL BUJAIIRI PAST, PRESENT AND FUTURE LANDSCAPE

Built heritage is one of the most important aspects of the authenticity identity of urban open space. Riyadh city is developing and transforming throughout the time. Consequently, its built heritage is the reflection of this change. Al Bujairi is one of developed urban open spaces in Riyadh city, it includes symbolic meanings for the citizens and visitors, often because of the significant historical background and events associated with it.

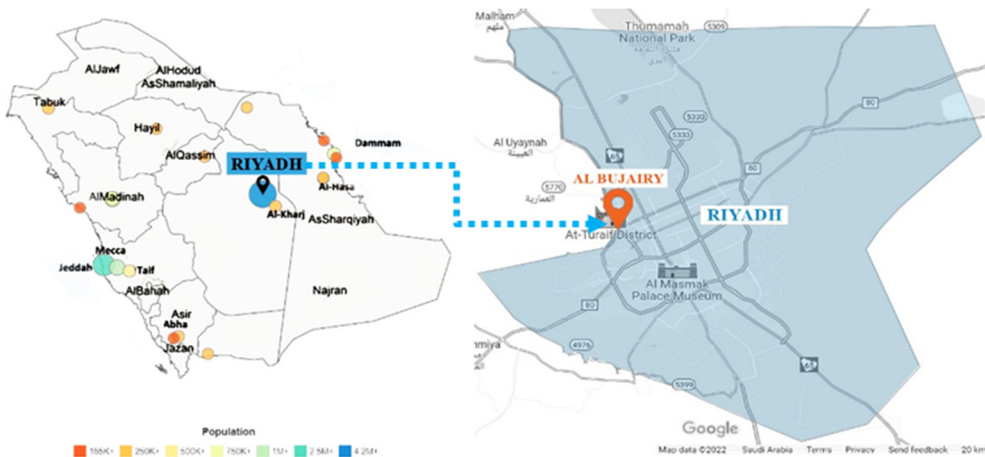


Figure 3: Saudi Arabia population density map and location of Al Bujairi park in Riyadh city [4], [31].

Buildings and structures of Al Bujairi tell a story of past with meanings and cultural values involved. Therefore, its heritage is assumed to be a distinct indicator of urban identity and thus conservation of kingdom heritage that is one of the major targets of 2030 Vision.

For millennia Al Bujairi was a traditional Najdi farming community that preserve Najdi architecture, which can be defined as “architecture of the extremes”, being basically similar to “regular” architecture but differentiated from it by its obligation to express the extreme desert environmental conditions. This is reflected in Najd Architecture, which are inward looking, leaving the desert outside.. Al Bujairi located at the east side of Wadi Hanifah right opposite the stronghold of At-Turaif. Al Bujairi Quarter is part of Ad-Diriyah covering nearly 2.5 km and protects the 300,000 square meter core UNESCO World Heritage site of At-Turaif.

Since King Abdulaziz bin Abdulrahman, Ad-Diriyah slowly grew, as well as Local Saudi families and new arrivals rebuilt homes and developed the eastern side of Wadi Hanifah adjacent to the palm groves of Al Bujairi and other settlements along the course of the Wadi. In 1917, At-Turaif itself was completely deserted included the settlement of Al Bujairi. Sir George Rendel, visiting the site in 1937, likewise found the site of At-Turaif deserted as his photographs show.

In 1960, a unique project took root in Al Bujairi: the establishment of the Social Development Centre on the northern edge of the historic Al Bujairi quarter. Set up in cooperation with the ministries of Education, Health, Agriculture, and Social Welfare, with United Nations support, this project was to successfully pioneer the country’s first national development program of its kind focusing on adult education and literacy, preventative medicine, public health, and agricultural improvement. This program in Ad-Diriyah was such a success that it was rolled out throughout the country [28].

By 1982 Al Bujairi still maintained its oasis character, with groves of date palms and gardens, a green screen fringing the remains of the former capital’s political heart. All that remained of the once vibrant quarter of Ad-Diriyah, famed far and wide as the heart of the Call of Sheikh Mohammad bin Abdulwahhab and a center of education and religious instruction were two mosques and a group of humble dwellings. In 1998, As a result of King

Salman bin Abdulaziz care and attention to the place when he was Governor of Riyadh; a Royal Decree approved the Historic Ad-Ad-Diriyah Development Program under the supervision of the High Commission of the Development of Riyadh [28] (Fig. 4).



Figure 4: 1917 and 1990s Ad-Diriyah and Al Bujairi quarters [29], [30].

In 2000, Riyadh Development Authority's ambitious Wadi Hanifah Wetlands Project restored the 120 km watercourse from its polluted condition into a beautiful natural recreational area. This gave the Authority its fourth Aga Khan Award for Architecture, one of the first of the awards to be given for an environmental project. The aims of this earlier project were to reshape the landscape and restore the wadi's natural beauty, enhance the environmental quality of the area, improve accessibility, and provide an extensive public recreational space that passed through historic Ad-Diriyah (Fig. 5).

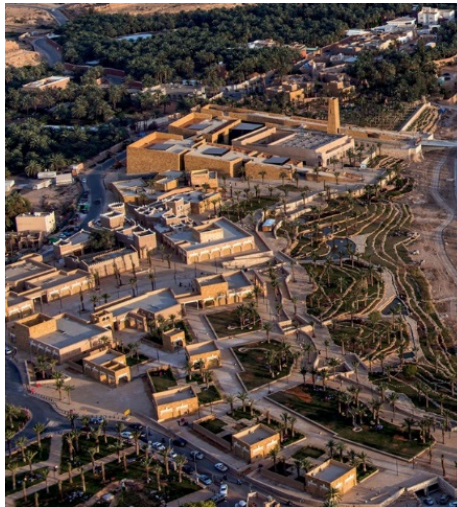


Figure 5: Al Bujairi Quarter Map 2015 [30].

In 2010, under the efforts and guidance of the Saudi Commission of Tourism and Antiquities according to the file and documents prepared by the High Commission for the Development of Riyadh; At-Turaif was listed by UNESCO as a World Heritage Site.

In 2015, Al Bujairi Quarter was a part of the Historic Ad-Diriyah Development Programme, which composed of gardens, a plaza, terraces stand as the gateway for visitors

to at Turaif. Its landscape offered most fascinating and evocative view of the old capital reflecting the old capital with its heritage by mud buildings and palace ruins along the wadi.

In 2015 as part of the Historic Ad-Diriyah Development Programme, the Al Bujairi Quarter was as gateway for visitors, it contained gardens, a plaza, terraces along the wadi, retail and restaurant facilities, art and heritage galleries, mosques, and the Sheikh Mohammad bin Abdulwahhab Foundation. The landscaped areas also protect the views enjoyed from Al Bujairi Quarter, provides perspective of the old city and its mud buildings and palace ruins, which are visible across the wadi [28].

Landscaping attempted to apply the principles of good landscape design: unity, harmony, proportion, focal points, sequence, rhythm, and repetition. The objective is to enhance the visitor experience by preserving as much of the original as possible while avoiding an overly neat approach that would detract from the character of the building. The landscape was as much similar to the original features to preserve the old atmosphere and heritage. Al Bujairi built using local materials shaping a delicate combination of Riyadh limestone, mud bricks and local athl wood that reflect the connection between the locality, the people, and their buildings. The new walls used the same stone to harmonize with the horizontal fracturing of the local rock.

The original date palms were replanted in the gardens retained by the new walls. Landscapers and project architects were keen to utilize the native species traditionally found in Najd. The Ziziphus tree, Sidr, was a highly valued species [28]. In 2020, a Royal decision – one of the Kingdom's Vision 2030 objectives about Al Bujairi has been taken to transform 7 km² into one of the Kingdom's most distinguished tourism destinations. Al Bujairi reflects the architecture of 300 years past as a significant tourism destination that are expected to attract more than 7 million visitors annually adapted 21st century model that enhance the quality of life for the community [29], [30]. Al Bujairi has been designed using the traditional Najdi architectural style and building methods in a pedestrian scale atmosphere in order to reflect Ad-Diriyah's historical significance as a gathering place. By the completion of the restoration and development program of Ad-Diriyah and Al Bujairi as a part of its various quarters a living heritage site, a bridge to the past and source of pride for the Saudi Nation and its future generations will be revived (Table 3).

11 EVALUATING AL BUJAIIRI THREE STAGES USING THE CHLD PRINCIPLES

As shown in Table 4 of evaluating Al Bujairi three stages using the CHLD principles; 2022 phase applied all CHLD principles. On the other hand, 2015 phase failed to achieve two points of understanding the history of people and place through illustrating patterns of socio-cultural history. In addition, the area has not maintained its heritage integrity which is obvious in most of buildings poor design that is not committed with Najdi architectural style details as it is illustrated in Fig. 6.



Figure 6: 2015 phase buildings design. (Source: <https://sabq.org/SICgde>.)

Table 3: Al Bujairi main four zones [30].

	
The Boulevard which is considered as the main spine of the Bujairi Dining Precinct, the Boulevard is a spirited place with activities, which reflects its role as the central food theatre with direct views towards the Event Plaza and At-Turaif World Heritage Site. The Boulevard streetscape will honor the history of Ad-Diriyah with magnificent fully traditional Najdi landscaping moreover bike tracks, horse bridle paths and natural shading for pedestrian promenades.	The Gallery that hosts year-round fine dining offerings, enhanced with dedicated art and culture spaces, the Gallery is the premium outdoor and indoor dining location with exclusive VIP Valet access.
	
The Event Plaza and Amphitheatre, the “heart” of the site, the Event Plaza is an outdoor space that will accommodate the iconic and distinguished performances and events. In addition, an open-air performance space to home outdoor screenings and live entertainment.	Wadi Walk the core of the wellness and lifestyle, the Wadi Walk and its spectacular views of At-Turaif will continue to be the main attraction of Al Bujairi.

While 2022 phase CHLD approach emphasizes genuine Najdi Architecture, building methods using same traditional materials such as mud bricks and local athl wood moreover gave a high attention to Najdi ornaments, which enrich place identity and enhance users image, it has been shown in Fig. 7.



Figure 7: Panoramic view of Al Bujairi [30].

Table 4: Evaluating Al Bujairi three stages using the CHLD principles.

Principles of evaluating cultural heritage landscape design.		Before 2000 phase		2015 phase		2022 phase	
		Yes	No	Yes	No	Yes	No
Criteria of the cultural landscape design according to Rössler and Lin [10]							
A. Designed landscapes	Masterpiece designed landscapes						
B. Organically evolved landscapes	Interchange of human values						
	Exceptional testimony to a cultural tradition or to a civilization						
	Type of building or architectural or technological ensemble or landscape						
	Traditional human settlement, land-use, or sea-use						
C. Associative cultural landscapes	Associated with events or living traditions, with ideas, or with beliefs, with artistic and literary work						
Criteria of the cultural landscape design according to heritage resources center and the region of Waterloo [7]							
Land ownership (must meet at least one of the following)							
A. City-owned land/OR other publicly owned lands consenting to inclusion in the CHL							
Geographic area							
A. Area contains features that contribute to its heritage character: vistas-rivers-ponds-forests-wooded areas rare/important collections of plant/animal species							
B. Area has historical land use/s							
C. Composition of individual features in area create a particularly important historic visual landmark							
Heritage significance							
A. Built: Structures-roads/paths (circulation patterns)-fences-bridges-waterworks-rail lines/corridors							
B. Archaeological: Prehistoric and/or historic ruins above or beneath ground.							
C. Modified land features: Farmlands-gardens orchards-parks							
Significance to the understanding of history of people/places							
A. Area associated with historic events, beliefs, themes							
B. Area associated with historic person/s							
C. Area illustrates broad patterns of socio-cultural history							
Geographic area valued by community from heritage perspective							
A. Area has significant heritage value for a variety of reasons							
Integrity							
A. Area, on the whole, has maintained its heritage integrity							
Age							
A. The period on which the area was created or was at its peak of significance is comparatively old in the context of the region							

2000 and before phase as shown in Table 4 suffer from neglect and many of the ruined structures had crumbled over time. Despite that the original layout of the monumental structures, courtyard buildings, streets and passageways remained, as well as the vestiges of the overall fabric of the settlement in a ramshackle condition. Therefore, thirteen principles not achieved in this stage explaining the Saudi government efforts since 2000 to reshape the area urban design and restore Al Bujairi historical beauty in addition to enhance the quality of the area.

12 CONCLUSION

This paper illustrated how the CHLD can help to understand the interaction between past and present, and between cultural heritage, identity, and landscape. The identity must be related with the urban culture, heritage, and history, with the value and the character of the places, with the specificity elements which gave identity to the urban open spaces. The rapid urban change of Riyadh present formidable threat of losing Saudi identity, which is the main reason for Kingdom action of enhancing the urban landscape environment for all citizens to raise sense of belonging and reinforce their identity in Saudi cities. Consequently, Various projects and initiatives have been taken place as one of 2030 Vision objectives and one of them was Al Bujairi development which was fundamental to adopt CHLD approach to reflect cultural characteristics of Najdi architectural style.

This approach is inspired by the history to create new global landmark that present authentic Najdi environment. This view is compounded the importance of CHLD as an essential design approach that emphasize the sense of belonging, which is developed by relationships with the environment to create livable place people can call home to inspire a past meet present feeling. Al Bujairi experience aims to promote Saudi identity through a spectacular experience to discover the stories that shaped Diriyah through walkable traditional Najdi streetscapes that offer luxury lifestyle retail and dining experiences, entertainment events and activities spaces designed with the latest international and local sustainable standards for 21st century living.

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