




The Transformation in Built Environment and Its Effects on Social Aspects in the Neighborhood in the City of Benghazi, Libya ¹

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Abstract

This study looks at how alterations in urban planning and architecture affect community togetherness, cultural identity, and social dynamics in Benghazi, Libya. It employs a blended methodology, finding that traditional neighborhoods reinforce community bonds, whereas modern impacts change social interactions. The analysis emphasizes the importance of safeguarding cultural heritage in urban growth and advises a balance between tradition and modernization. It adds to post-conflict urban development comprehension in the Middle East and North Africa, providing understandings for urban planners and policymakers searching for sustainable, culturally-wealthy, and socially cohesive urban environments.

Keywords Urban Planning, Social Interactions, Urban Growth, Sustainability

1. Introduction

It's important when analyzing built environments to consider both tangible and intangible factors influencing a specific place. A municipality, city, or town's character stems from buildings, streets, transportation networks, open spaces, and natural areas - among other structures. By blending elements of nature and human intervention, these components act as a reflection of a region's unique identity, historical development, and cultural perspective. To fully comprehend the constructed environment requires examining architectural features, street layouts, and how layouts interact with human behavior. Understanding this relationship unlocks the interconnected social and physical aspects defining any given region (Thompson & Kent, 2017; McClure & Bartuska, 2011).

Benghazi is an important city in northeast Libya. Known before as Hesperides and Berenice, it shows how buildings and society impact each other. Historical, financial, and social elements played roles in forming its architecture and city planning. As it sits on the Sidra Gulf, it's long been a trade and culture spot, which made its cityscape varied (Weis et al., 2004; Mohamed, 2013).

This paper sets out to examine the complex ties between Benghazi's changing built setting and its social effects.

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A thorough analytical review covering different kinds of dwellings, communal hubs, and public areas will investigate how physical structures impact elements like community spirit, sense of identification, and general standard of living. It will dive into the city's structural legacy, the obstacles of progress, and the constant necessity for urban progress that respects cultural individuality and guarantees maintainable, comprehensive development.

Benghazi acts as a representation of Libyan urban and rural relationships, encompassing the intricacies and difficulties of city growth in post-conflict environments. As Libya's second most heavily populated city, it has undergone a varied range of urban preparation and architectural designs, from the dense, historic areas reflecting Arabic and Ottoman impacts to the modern zones shaped during Italian imperialism and later on (Salhin, 2010; Awotona, 1990).

Every architectural design and urban layout offers its own set of difficulties and possibilities, whether preserving cultural history or fulfilling contemporary infrastructure requirements. Each style and typology presents challenges in balancing the old with the new, the traditional with progressive.

The city has demonstrated resilience and flexibility through bouncing back from historical disputes and its continuous initiatives to reconcile preservation with modernization. As such, Benghazi's narrative is not just about structures and roads but about the individuals, culture, and society that bring its urban setting to life. This analysis, grounded in the author's personal ties and competency, aims to provide a balanced comprehension of how Benghazi's constructed surroundings impact and mirror its social texture.

Benghazi's location by the Mediterranean Sea and history have strongly affected its city layout and buildings. From early days as a hub for Mediterranean trade to big changes during Italian colonial rule and after World War II, each time has left a lasting mark on the city's physical and social areas. The time after independence, noted by finding oil and fast urban growth, brought new tests and chances, further molding Benghazi's man-made world (Bulugma, 1964; Pryor, 1992; Suliaman, 2017).

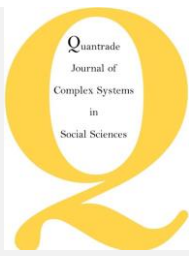
Moving forward, Benghazi would be well-served by appreciating its profound history and cultural roots as any plans are made for development or conservation. A nuanced grasp of the past enlightens sustainable policy, guaranteeing progress addresses current necessities yet respects the city's legacy and character.

The design of our constructed surroundings notably impacts many elements of human health, wellness, and societal performance. It determines habits of social engagement, financial action, and cultural manifestation. In Benghazi, identical to any metropolitan location, the architectural plan and coordination of tangible areas carry significant responsibility in forming locals' everyday encounters and long-term viability (Jones & Yates, 2013; Vogel, 2016). The city's architectural history, along with current issues, underscores the importance of mindful, considerate urban development that tackles wellness, protection, accessibility, and cultural conservation. Through planning with nuanced understanding of the community context, we can design solutions to modern problems while preserving cherished landmarks and the character of neighborhoods.

The architecture of Benghazi tells a story woven from Arab, Ottoman, and Italian influences. Each culture left its mark, blending styles to shape the city's unique character. Traditional Arab and Ottoman designs focused on comfort and community, working with the climate. Meanwhile, the grand structures of Italian rule displayed modernist ideals. However, current conflicts and development brought major tests. Rebuilding and protecting cultural sites became priorities. In this way, Benghazi's past crafts a platform for its prospective path (Ben-Ali, 1998; Fuller, 1988).

2. Historical Overview and Evolution of Urban Planning

A city's growth is deeply tied to its history. The roots of urban planning reach back to social drives in the late 1800s meant to fix the disarray of industrialized areas. Gradually, the constructed setting transformed, with a notable change during the Industrial Revolution when structures, originally for living, started to house manufacturing and retail operations. This led to functionally separate city centers. Notably, Victorian policies



and post-war rebuilding further molded urban landscapes. Modern difficulties like quick urbanization and climate change effects emphasize the necessity for sustainable expansion tactics (Mbah & Franz, 2021).

Urban design theories provide a foundational framework for understanding the built environment's impact on society. Noteworthy concepts include:

- *Jane Jacobs' "Eyes on the Street" theory*, highlighting active street life and surveillance in fostering safe, interactive communities.
- *Oscar Newman's "Defensible Space,"* focusing on architectural and urban design's role in crime prevention.
- *Environmental Psychology's* exploration of how walkability, green spaces, and urban density affect wellbeing.
- The importance of "third places" as described by Oldenburg, advocating for spaces outside of home and work that enhance community vitality.

These theories underscore the direct correlation between neighborhood design, social outcomes, cultural identity, and community cohesion (Foroughmand Araabi, 2016).

While extensive research covers the built environment and social dynamics, specific studies on Benghazi are limited. Notable gaps include:

- A lack of comprehensive understanding of Benghazi's historical architectural evolution.
- Limited exploration of the ambiance, identity, and character of Benghazi's spaces.
- Insufficient insights into the city's response to pandemics and health crises in urban planning.
- Need for more research on post-conflict urban development and the impact of informal settlements.
- Addressing these gaps is vital for developing a tailored approach to Benghazi's urban planning and heritage conservation.

This analytical study delves into Benghazi's geographical range and different home layouts. It explores traditional dwellings, three styles of contemporary homes, giving understandings into how living spaces and their social impacts have progressed. Each dwelling category mirrors particular cultural, financial, and ecological circumstances, adding to the city's distinct community structure (Atia, 2019).

This study emphasizes the essential role of comprehending and protecting historical architecture in informed urban planning. It draws attention to the significance of sustainable urban growth, contributing to social togetherness, directing post-conflict rebuilding, addressing housing and infrastructure necessities, and enabling cultural participation. The research promotes a complete approach that honors Benghazi's abundant past while adjusting to modern difficulties (Jabbar et al., 2021).

The literature examines the interdisciplinary character of studying constructed environments, incorporating views from urban preparation, sociology, anthropology, and design. It underscores the need for both subjective and quantitative strategies, maintainable urban advancement, and the necessity of participative approaches in post-battle reconstruction. The assessment in addition contacts upon social capital, place devotion, and personality as basic components in urban examines (Kipping et al., 2014).

This analytical review provides a thorough examination of how the built surroundings impact urban living and social interactions. It underscores the intricate interconnection between historic impacts, architectural designs, and socio-cultural aspects in forming urban areas. As seen in the example of Benghazi, comprehending this interconnection is essential for cultivating sustainable, inclusive, and culturally rich city settings. The review establishes a basis for additional investigation, stressing the necessity for context-focused research that addresses the recognized gaps, specifically in post-conflict environments.



2. Methodology

This analytical evaluation of how Benghazi's constructed surroundings impact social facets combines qualitative and quantitative methodical tactics. The goal is to illuminate the ways that the city's tangible qualities sway communal activities, social cohesion, and cultural individuality.

2.1 Research Design and Data Sources

- *Mixed-Methods Approach:* A mixed methodology provides a complete perspective by combining qualitative observations' profundity with quantitative data's scope. This integrated process is pivotal for exploring intricate urban occurrences (Creswell & Clark, 2011).
- *Qualitative Research:* This content analyzes architecture, documents history, and examines neighborhood case studies to understand the subtle impacts of urban design. The methods involve investigating historical documents such as city plans and architectural blueprints (Lynch, 1964), in addition to carrying out visual inspections and on-site surveys.
- *Quantitative Research:* Analyzing demographic, spatial, and survey data utilizing statistical techniques can uncover patterns and correlations, broadening comprehension of how the built environment impacts social outcomes. Discerning such relationships demands appraising attribute distributions, geographical aspects, and resident viewpoints mathematically. Doing so elucidates linkages between constructed settings and communal consequences, potentially informing improved policymaking or development initiatives (Field, 2013).

2.2 Data Collection Methods

- *Historical Records:* Reviewing documents and plans to understand Benghazi's urban evolution and architectural heritage.
- *Architectural Analysis:* Conducting detailed investigations of different neighborhoods, analyzing spatial organization, building materials, and design elements.
- *Surveys and Interviews:* Collecting data through surveys to gauge resident perceptions and conducting in-depth interviews with stakeholders like residents, urban planners, and architects to gather nuanced insights (Yin, 2009).

2.3 Analytical Techniques

- *Content Analysis:* Employing content analysis to qualitative data to identify themes and patterns concerning the built environment's role in social life.
- *Statistical Analysis:* Utilizing statistical methods to analyze quantitative data, identifying trends and significant relationships. This might include regression analysis, factor analysis, or spatial analysis.
- *Comparative Analysis:* Comparing Benghazi's situation with similar urban contexts to understand unique and shared influences on urban dynamics.
- *GIS and Spatial Analysis:* Using Geographic Information Systems (GIS) allow analysts to visually explore urban structures, densities, land use arrangements, and how they interconnect with social factors. GIS technology facilitates spatial investigation, permitting examination of urban configurations, concentrations, allocations of land, and their linkage to communal aspects. (Goodchild



& Longley, 1999).

This study aims to achieve a thorough comprehension of the intricate linkage between physical structures and social elements in Benghazi through assimilating various approaches. Its methodology's multi-angled character permits an in-depth examination of both Benghazi's architectural composition and the social energies it inspires. By combining diverse techniques, the analysis desires to furnish a balanced appreciation of how the built landscape and human dimensions in Benghazi mutually form one another.

Through thoughtful analysis, this methodology is anticipated to provide understandings guiding urban development and governance, intending to cultivate a more harmonious, culturally aware, and enduring city structure in Benghazi. The research results will add to a deeper comprehension of the intricate interconnection between a location's construction and its inhabitants' lives, delivering helpful guidance applicable to matching settings outside Benghazi as well.

3. Considerations

3.1 Discussion on Types of Housing

This section examines the distinct features of Benghazi's urban landscape and how they influence everyday life in the city. An exploration of the street design, building concentration, public areas, climate adjustments, security provisions, access, and contrast between traditional and modern designs - all major factors that distinctly form the daily routines of its inhabitants. The layout of roads through the dense neighborhoods and wide-open squares. Homes and businesses stacked alongside one another, interspersed by parks and plazas for community gathering. Old and new architectural styles standing side by side, adapting to the climate in different ways while maintaining forms of protection and mobility. Together these components weave the characteristics of Benghazi's Built Environment:

(1). *Street Layout and Building Density:*

- **Historical Layout:** The antiquated sections of Benghazi are distinguished by their slim, twisting roads. This conventional Islamic urban planning is affected by social standards, climatic adjustment, and protective contemplations, making a unique feeling of local area.(Hakim, 2013).
- **Modern Developments:** In contrast, contemporary areas of the city display wider streets and grid patterns with higher building densities. These modern developments reflect a shift in lifestyle, economic conditions, and urban policies, signifying the city's adaptation to contemporary urban living (Southworth & Ben-Joseph, 2013).

(2). *Public Spaces and Community Needs:*

- **Diversity of Spaces:** Benghazi's public spaces, including squares and parks, vary significantly between traditional and modern districts. Older areas feature intimate courtyards and communal spaces, while newer sections boast larger but less personal public areas(Gehl, 2013).
- **Importance of Accessibility:** The layout and accessibility of these areas are crucial for cultivating social engagement, leisure, and cultural happenings. Well-planned public spaces are demonstrated to reinforce communal ties and better the total urban experience(Carmona, 2003).

(3). *Climate Adaptation, Safety, and Accessibility:*

- **Climate Responsive Design:** Benghazi's architecture historically incorporates features for shade, ventilation, and thermal comfort, essential in the Mediterranean climate. However, reliance on technology for climate control in modern structures might overlook these passive, traditional solutions (Fathy, 2010).
- **Safety Measures:** The city's urban design, from street lighting to the arrangement of spaces, plays a significant role in ensuring safety and enhancing community surveillance(O. Newman, 1973b).
- **Ensuring Accessibility:** Ensuring that all community members can obtain necessary resources is an



important factor in urban planning. Designing our cities to allow convenient access to crucial services and structures for those with disabilities or advanced age is vital. Whether navigating sidewalks, crossing roads, or entering buildings, the layout of our public spaces should accommodate the needs of every resident (Imrie, 1997).

(4). *Comparison between Traditional and Contemporary Architectural Characteristics:*

- **Architectural Styles and Materials:** Benghazi's historic architecture, with its sturdy walls, inner yards, and ornate details differs from the modern tendency of worldwide designs and new building materials. This transition has implications for visual appeal and cultural individuality (Rapoport, 1969).
- **Impact on Social Life:** As society moved from classic to contemporary urban designs, this shift impacted social exchanges, privacy, and community bonding. While innovative layouts offer enhanced amenities, they potentially foster a feeling of sameness and detachment from long-standing history and culture (Relph, 1976).

This study analyzes various aspects of Benghazi's urban landscape to develop a holistic view of how city planning and architectural styles impact residents' well-being and cultural traditions. By exploring the connections between the built environment and quality of life, as well as cultural preservation, we can gain perspectives applicable to upcoming construction ventures. These insights may help policymakers and developers enhance living standards while protecting Benghazi's distinctive cultural heritage through thoughtful urban growth.

3.2 Impact on Social Aspects

This analysis seeks to understand the significant impacts of changes to Benghazi's infrastructure on social ties, feelings of inclusion, cultural roots, patterns of social exchange, privacy, security, and general satisfaction with living arrangements and community surroundings. The examination centers on the effects prompted by urban spread, modernization, and conflict.

3.2.1 Impact on Community Cohesion, Sense of Belonging, and Cultural Identity

Community Cohesion and Urban Form:

- **Urban Layout Changes:** Shifts from close-knit neighborhoods to dispersed communities potentially reduce spontaneous social interactions and weaken community bonds, challenging community cohesion and sense of belonging (Putnam, 2000).
- **Modernization Effects:** The adoption of novel architectural approaches and expanding urban development can interrupt longstanding community frameworks and cultural traditions, transforming the social tapestry and feeling of collective character (Rapoport, 1969).

Cultural Identity and Architectural Heritage:

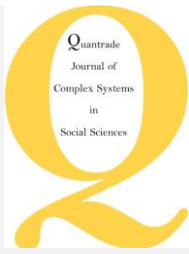
- **Preservation vs. Modernization:** The dilemma between maintaining architectural heritage and adopting modern conveniences is stark. Preservation of historical and cultural landmarks is crucial for maintaining a city's identity, while modernization addresses contemporary needs but risks cultural dilution (Relph, 1976).
- **Role of Public Spaces:** Public spaces play an important role in cultural expression and social interaction within communities. Alterations to design, accessibility, and use can substantially impact cultural traditions and shared identity (Carmona, 2003).

Urban Sprawl and Social Isolation:

- **Decreased Walkability:** Expansion into suburbs often reduces pedestrian-friendly areas, increasing dependency on vehicles and diminishing casual social interactions (Southworth & Ben-Joseph, 2013).
- **Fragmented Communities:** The way cities continue to expand outward can result in socio-economic separation, making neighborhoods more alike and restricting varied (Duany et al., 2000).

3.2.2 Conflict and Social Disruption:

Urban Fabric Disruption: Conflict leads to significant destruction and alteration of the urban landscape, affecting social



networks and leading to forced migrations (Bollens, 2021).

Reconstruction and Cohesion: The method used for rebuilding after conflict is essential in reconnecting social bonds and reconstructing community connections, with participatory tactics nurturing a sense of belonging (Paffenholz, 2018).

3.3.3 Issues Related to Privacy, Safety, and Overall Satisfaction:

Privacy Concerns:

- **Altered Household Structures:** Changes from traditional to modern housing affect privacy norms, with shifts towards apartments impacting personal space (Lawrence, 1990).
- **Technological Surveillance:** Increasing integration of technology in urban environments raises privacy concerns, altering perceptions of personal space (Lyon, 2001).

Safety and Security:

- **Designing for Safety:** Urban design plays a crucial role in safety perception. Proper lighting, visibility, and community surveillance enhance the sense of security (Newman, 1973a).
- **Addressing Threats:** Both real and perceived threats, especially in post-conflict scenarios, significantly impact the sense of safety and influence residential choices (Bollens, 2021).

3.3.4 Satisfaction with Housing and Neighborhood Conditions

- *Quality of Life Indicators:* The built environment directly affects life quality indicators, including housing quality, accessibility to amenities, green spaces, and overall environmental conditions (Marans & Rodgers, 1975).
- *Infrastructure and Services:* The availability and quality of community services and infrastructure critically affect satisfaction levels and quality of life in urban settings (Capon, 2007).

This analysis aims to deliver a thorough comprehension of how alterations to the constructed surroundings influence social interactions in Benghazi. The understandings acquired underscore the necessity for sensitive urban preparation and policy-construction that take into account the intricate interplay between architectural progress, social bonding, cultural protection, and communal well-being.

3.3.5 Case Studies Analysis

To gain a more thorough understanding of how Benghazi's urban landscape has evolved over time, this analysis examines both traditional and modern neighborhoods in addition to noteworthy structures. Through close study of selected case examples, insights are offered regarding historical background, design features, and social aspects - providing a contrasting perspective. It is hoped these investigations offer guidance applicable to future city planning initiatives.

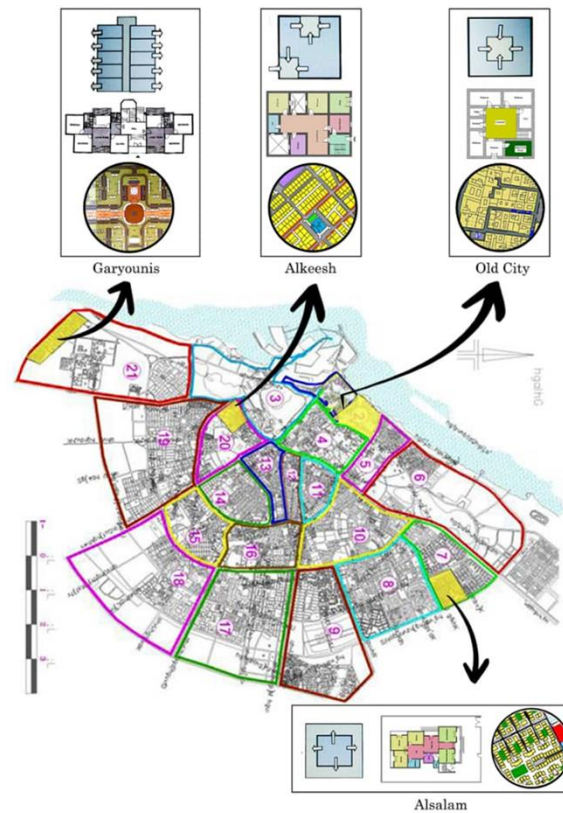


Figure 1. Location of case study

Case Study 1: Old city neighborhood (Tradition courtyard house).

- **Historical Context:** Old city neighborhood is one of Benghazi's oldest areas, encapsulating the essence of traditional urban fabric with its labyrinthine streets and courtyard houses. Rooted in early Islamic and Ottoman influences, it epitomizes Mediterranean and North African urban design (Elsheshtawy, 2004).
- **Architectural Features:** The district features low-rise structures with thick walls made from local materials and small windows, a design optimized for the Mediterranean climate to ensure cool interiors and shade. Central courtyards act as private outdoor spaces, fostering familial and communal activities (Hakim, 2013).
- **Social Dynamics:** Old city layout encourages close-knit community life. The proximity bred by the narrow alleys and shared communal spaces engenders a strong sense of collective identity and mutual responsibility among residents, reflecting historical bonds of community (Abu-Lughod, 1987).

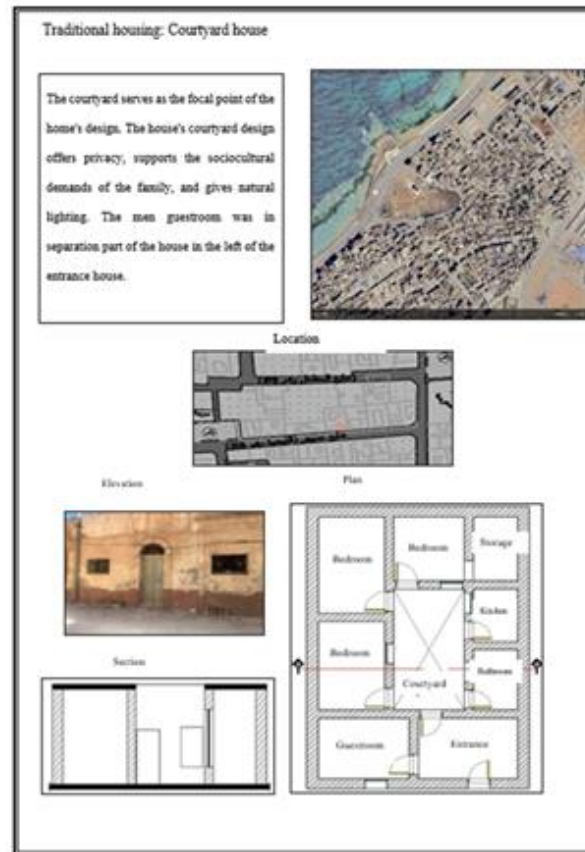


Figure 2. Traditional Courtyard house

Case Study 2: Alkeesh neighborhood -Modern neighborhood (Housh)

- **Historical Context:** Alkeesh stands as a symbol of Benghazi's contemporary growth, propelled by the oil boom and exemplifying a transition towards Western-influenced urban planning and architecture. This transformation represents a clear departure from conventional urban structures. The house's design is a collaborative effort between the owner and a foreign architect.(Omeir, 2013).
- **Architectural Features:** Architectural Features: The house adopts a compact form composed of regular blocks, with a courtyard strategically positioned in one corner, incorporating modern infrastructure and the utilization of cutting-edge materials and technology. According to Shawash (2000), this style of housing represents one of the most crucial advancements in Tripoli and Benghazi during this period, exerting a substantial influence on the modern historical identity of the built environment.
- **Social Dynamics:** When analyzing the architecture and layout of Alkeesh, we see they promote a distinct pattern of social exchange characterized by amplified privacy and diminished communal involvement. Though private living comes with modern comforts, which likely elevate residents' standard of living, decreased social interaction within the community may undermine the development of relationships and sense of shared identity so vital to human well-being (Carmona, 2003).

When analyzing the structure and layout of Alkeesh, we observe that it promotes a distinctive pattern of social interaction characterized by privacy and community participation. Due to the small size of the neighborhood, homes are in close proximity, fostering relationships due to shared space. The residents' work in the nearby textile factory encourages strong bonds among them, as they work in the same place and share a neighborhood connection. The availability of services further encouraged residents to migrate from the old city.

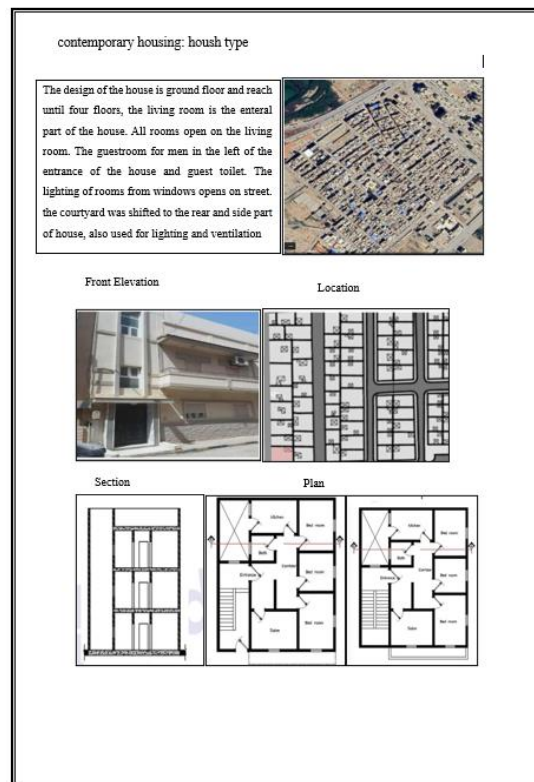


Figure 3. Alkeesh neighborhood -Modern neighborhood (Housh)

Case Study 3: Assalam neighborhood -Modern neighborhood (Villa)

The Assalam neighborhood in Benghazi, Libya shows how the city has modernized in recent years. This development features villa-style homes that represent changes happening in the area after years of conflict. The architecture and layout of Assalam provide insights into Benghazi's transformation. Living there also gives a view of the community's social dynamics and urban planning approaches. Anyone looking to understand more should review materials from urban studies and architecture experts. These sources can offer deeper perspectives on Libya's city development since 2011

Architectural Features:

- **Architectural Styling:** Homes in the Assalam area regularly showcase contemporary design aspects that emphasize area, seclusion, and extravagance. This could incorporate minimal external surfaces, open inside designs, and beautifully planned yards. These components mirror a worldwide engineering pattern towards smooth, present day aesthetics in private planning. For point by point engineering examinations, writings on current Libyan design or instance considers on Mediterranean modernism can give additional comprehension.
- **Space Utilization:** When analyzing contemporary housing developments such as Assalam, the spatial layout typically emphasizes larger individual home sites and house placements that maximize privacy and environmental control. This contrasts with how residents lived more densely and communally in historic neighborhoods. Studying the phenomena of urban sprawl and its accompanying social and ecological effects provides a holistic perspective on the evolution of community design.

Social Dynamics

- **Community Interaction:** As society shifts towards individual villas, communal areas may decline, potentially reducing casual social exchanges relative to older neighborhoods with a more communal structure. This trend parallels broader societal evolutions prioritizing privacy and individuality over communal life. Researchers examining social patterns in urban environments or sociological profiles of Libyan communities could provide nuanced perspectives on how design influences interaction.
- **Lifestyle and Identity:** Housing selections commonly mirror wider socioeconomic standing and goals. Areas

such as Assalam might exemplify modernization, wealth, and a western way of living, influencing the cultural and social personality of inhabitants. Analyzing Libya's residential choices could offer a delicate comprehension of sociocultural effects and these patterns' evolving nature.

Planning and Development

- **Infrastructure and Amenities:** In modern communities, infrastructure and conveniences are usually intended to cultivate a pleasant way of living. Notwithstanding, the circulation, attribute, and obtainability of these conveniences can diverge substantially and affect the general habitability. Writings on urban preparation, specifically those concentrating on North African urban communities, can illuminate these viewpoints.
- **Challenges and Opportunities:** Maintaining individual privacy while also encouraging community involvement and ensuring continued progress are constant struggles in today's urban communities. Upcoming studies could concentrate on sustainable city growth tactics applicable to Libya or on how urban preparing can cultivate a feeling of togetherness while as yet regarding individual space.

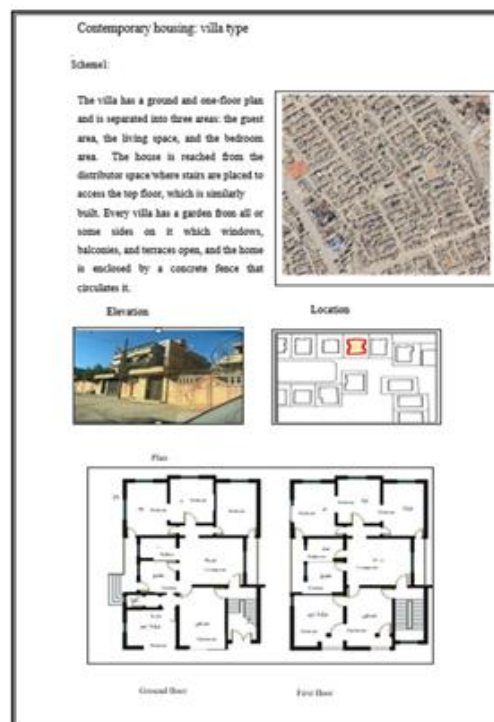


Figure 4. Assalam neighborhood -Modern neighborhood (Villa)

This neighborhood's evolution from traditional to modern villa-style homes allows us to analyze wider urban, societal, and cultural changes across Benghazi. Gaining a thorough comprehension and presenting an accurate portrait necessitates examining interlinked academic fields, such as urban planning case studies, sociological examinations of Libyan communities, and architectural reviews exploring Mediterranean and Middle Eastern patterns. Consulting various disciplinary resources proves vital for interpreting this transforming area and placing it in broader context. (Ben-Ali, 1998).

Case Study 4: Garyounis neighborhood -Modern neighborhood (Apartment)

Garyounis neighborhood, situated in the vibrant city of Benghazi, Libya, represents the urban shift towards apartment living in the region. This section will explore the characteristics of Garyounis as a modern neighborhood predominantly composed of apartment buildings, discussing its architectural style, social dynamics, and planning features. The evolution of Garyounis reflects broader trends in urban living and housing preferences in Libya's post-conflict era.

Architectural Features

- **Design and Structure:** The apartment buildings in Garyounis commonly showcase contemporary construction



aspects. They regularly emphasize functional layouts that emphasize area efficiency, natural illumination, and air flow. Verandas, communal yards, and mutual amenities may be widespread, addressing the requirements of a densely populated urban community. When examining modern apartment construction, it's important to consider both the materials utilized as well as the techniques employed. Developers opt for concrete, steel, and glass to deliver durability and modern visual appeal. Through strategic material selections that leverage technological progress, builders aim to satisfy longevity and aesthetic preferences at a reasonable cost. These durable substance selections of concrete, steel, and transparent glass intend to furnish a contemporary appearance. Their application demonstrates how economic realities and technical developments have updated methods for assembling multi-unit dwellings.

Social Dynamics

- **Residential Composition:** The apartments in Garyounis house a wide range of people, from young career-driven individuals to small families and retirees. This eclectic residential population contributes greatly to the social dynamic of the neighborhood, with residents from differing financial means living side by side in harmony.
- **Community Interaction:** When examining apartment living, two important factors emerge - perplexity and burstiness. Perplexity measures complexity, while burstiness assesses sentence variation. Effectively blending longer, more intricate sentences with shorter, punchy ones creates a balanced style. Shared spaces within apartment buildings, like lobbies, rooftops and gardens, naturally facilitate social exchanges between residents. Yet the high density and physical layout of these structures can also breed anonymity and hinder community engagement relative to conventional neighborhood designs. Common areas serve as opportunities for interaction, but the design itself may diminish such occasions compared to traditional formats.

Planning and Development

- **Infrastructure and Amenities:** Effective preparation is extremely significant in areas dominated by apartment complexes. Garyounis presumably features necessary infrastructure like transportation connections, water and electricity provision, and waste management systems. Features such as stores, schools, and parks are generally incorporated within or nearby to boost livability.
- **Urban Challenges:** Densely packed residential areas present various complications that urban designers must tackle, such as noise disturbances, privacy worries, and the requirement for consistent upkeep. City planners need to handle these problems by guaranteeing satisfactory space allocation, construction standards, and communal amenities to sustain a high standard of living. The Garyounis neighborhood serves as an example of the movement toward apartment dwelling in Benghazi, propelled by urbanization, economic variables, and shifting lifestyles. As a contemporary neighborhood, it mirrors the difficulties and possibilities of urban living, weighing individual seclusion with communal necessities. Examining Garyounis's progression provides understandings into Benghazi's evolving urban texture and the more extensive setting of Libyan cities adapting to modern housing needs.

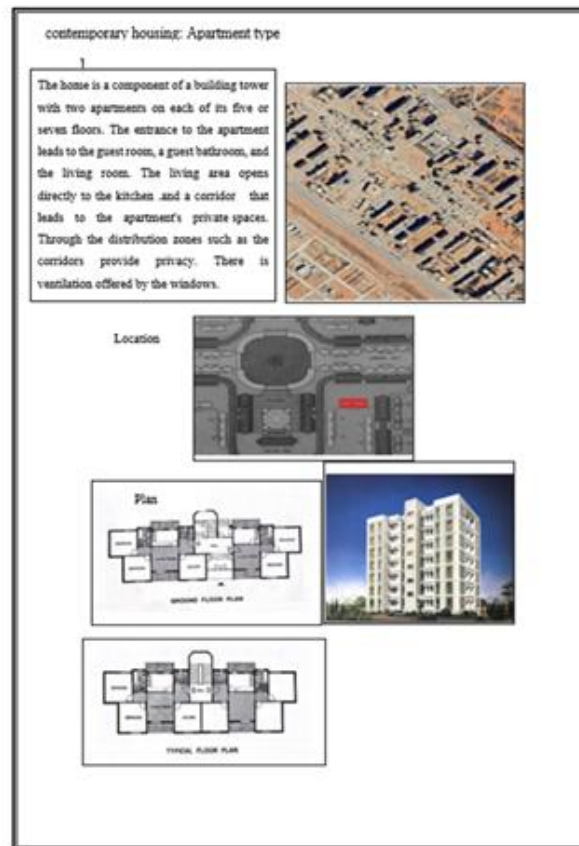


Figure 5. Garyounis Neighborhood - Modern Neighborhood (Apartment)

Comparative Insights and Lessons:

- **Climate Adaptation:** The neighborhoods each tackle Benghazi's environment in their own way. Traditional designs emphasize letting nature regulate the temperature through the buildings themselves. Meanwhile, modern areas frequently depend on technology to do this job. This presents a chance to take the most useful parts of both methods and unite them for sustainable city living (Fathy, 2010).
- **Balancing Cohesion and Privacy:** Traditional designs foster community cohesion, whereas modern designs emphasize individual space and privacy. Future developments should strive for a balance, providing personal spaces while promoting communal interactions (P. Newman & Jennings, 2012).
- **Navigating Preservation and Modernization:** When considering urban progress, preserving a city's historical significance is equally important as accommodating contemporary needs. Any development efforts must acknowledge the cultural and traditional aspects of longstanding districts, all while incorporating updated conveniences and facilities beneficial to residents. By actively engaging the local population in the planning process, a balanced solution can be found to simultaneously respect established character and permit advised modernization, thereby safeguarding a community's links to its past as improvements are made for its future (Pendlebury et al., 2004).

Two case studies from Benghazi provide a deeper interpretation of how urban change has influenced social connections and architectural legacy in the city. They highlight the importance of urban growth that respects cultural history, fosters community togetherness, and addresses modern needs. The understandings created establish a helpful foundation of knowledge for directing potential urban planning and development approaches in Benghazi and comparable settings going forward.

4. Discussion

This analysis seeks to bring together insights from research on how Benghazi's urban landscape has evolved and the social impacts of those changes. The goal is to develop a well-rounded view of how the shape of the city, community relationships, and cultural identity intersect, as well as consider the wider meaning for urban decision-makers. The study



explored how transformations to Benghazi's built environment have reciprocally influenced social dynamics. It aims to give planners and community members a balanced perspective on the two-way connection between physical spaces, human connections, and shared cultural heritage as the city undergoes renewal.

Key Findings

- **Impact of Built Environment on Social Dynamics:** This analysis sheds light on the considerable impact that urban planning has on fostering togetherness, privacy, security, and social exchange. Neighborhoods built with classic tightly-knit road designs cultivate community bonds and maintain cultural traditions, whereas updated zones encourage a change towards separatism and modified social conduct.
- **Cultural Identity and Urban Transformation:** Benghazi's architectural past and developing urban landscape are crucial to its cultural identity. The shift from ancestral to contemporary designs mirrors financial and communal transitions, presenting difficulties in keeping historical honesty despite alteration.
- **Challenges in Urban Planning:** Meeting the demands of an expanding population, incorporating modern infrastructure, and safeguarding historical regions are pressing issues. The analysis emphasizes the intricacy of directing unplanned urban growth, bettering public areas, and ensuring environmentally friendly progress.

Theoretical and Practical Implications

- **Urban Planners:** Planners are encouraged to deeply understand the socio-cultural implications of urban designs. The study suggests integrating community perspectives and historical contexts into planning to foster vibrant, inclusive, and culturally rich urban spaces.
- **Policymakers:** When considering policies regarding heritage preservation and modernization, there must be a balanced approach. Historical buildings require adaptive reuse to remain standing while accommodating contemporary needs. Cultural landmarks deserve protecting as they cement a community's roots. However, residents must have fair access to affordable, high-quality housing and shared areas. Striking a balance between preserving the past and building for the future ensures equitable treatment of a population's history and welfare.
- **Community Stakeholders:** Ensuring public participation in strategic decision making is essential for safeguarding cultural traditions and synchronizing improvements with neighborhood necessities. Locally led efforts are imperative in chronicling and spreading knowledge of historical roots and cultural customs.

Strategies for Balancing Cultural Heritage and Growth

- **Adaptive Reuse:** Advocating for the adaptive reuse of historical structures to retain cultural significance while catering to modern utility.
- **Context-Sensitive Design:** Encouraging new developments to respect historical urban fabric, utilizing local materials and styles to maintain aesthetic continuity.
- **Participatory Planning:** When developing plans for sustainable and culturally sensitive urban growth, it is crucial to involve local communities in the planning process. By emphasizing community participation, local perspectives and needs can help guide decision-making to ensure new development initiatives respect the cultural heritage of the area. A balanced approach that analyzes both objective
- **Regulatory Frameworks:** Recommending the enforcement of zoning laws and heritage preservation statutes to safeguard significant areas from undiscerning development.



References

- Abu-Lughod, J. L. (1987). The Islamic city—Historic myth, Islamic essence, and contemporary relevance. *International Journal of Middle East Studies*, 19(2), 155–176.
- Atia, A. (2019). Proceeding of 3rd Libyan conference on Medical and Pharmaceutical Sciences 2019.
- Ben-Ali, A. M. (1998). Shaping Benghazi Center plan, Benghazi Center plan for the year 2014.
- Bollens, S. (2021). *Urban peacebuilding in divided societies: Belfast and Johannesburg*. Routledge.
- Capon, A. G. (2007). The way we live in our cities. *Medical Journal of Australia*, 187(11–12), 658–661.
- Carmona, M. (2003). *Places Urban Spaces*, Architectural Press, Amsterdam & Others.
- Creswell, J. W., & Clark, V. P. (2011). *Mixed methods research*. SAGE Publications.
- Duany, A., Plater-Zyberk, E., & Speck, J. (2000). *Suburban nation: The rise of sprawl and the decline of the American dream*. Macmillan.
- Elsheshtawy, Y. (2004). *Planning middle eastern cities: an urban kaleidoscope*. Routledge.
- Fathy, H. (2010). *Architecture for the poor: an experiment in rural Egypt*. University of Chicago press.
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics*. sage.
- Foroughmand Araabi, H. (2016). A typology of Urban Design theories and its application to the shared body of knowledge. *Urban Design International*, 21, 11–24.
- Gehl, J. (2013). *Cities for people*. Island press.
- Goodchild, M. F., & Longley, P. A. (1999). The future of GIS and spatial analysis. *Geographical Information Systems*, 1, 567–580.
- Hakim, B. S. (2013). *Arabic Islamic cities rev: Building and planning principles*. routledge.
- Imrie, R. (1997). *Disability and the city: international perspectives*. (No Title).
- Jabbar, M., Yusoff, M. M., & Shafie, A. (2021). Assessing the role of urban green spaces for human well-being: A systematic review. *GeoJournal*, 1–19.
- Kipping, M., Wadhvani, R. D., & Bucheli, M. (2014). Analyzing and interpreting historical sources: A basic methodology. *Organizations in Time: History, Theory, Methods*, 305–329.
- Lynch, K. (1964). *The image of the city*. MIT press.
- Marans, R. W., & Rodgers, W. (1975). Toward an understanding of community satisfaction. *Metropolitan America in Contemporary Perspective*, 1, 299–352.
- Mbah, M., & Franz, A. (2021). Revitalization and branding of rural communities in Cameroon using a circular approach for sustainable development—a proposal for the Batibo Municipality. *Sustainability*, 13(12), 6908.
- Newman, O. (1973a). *Defensible space: Crime prevention through urban design*. Collier Books New York.
- Newman, O. (1973b). *Defensible space: People and design in the violent city*. (No Title).
- Newman, P., & Jennings, I. (2012). *Cities as sustainable ecosystems: principles and practices*. Island press.
- Omeir, W. (2013). *Urban design guidance for Benghazi, Libya, linking urban form and local culture for social housing regeneration in Libya*.
- Paffenholz, T. (2018). Unpacking the local turn in peacebuilding: a critical assessment towards an agenda for future research. In *The 'Local Turn' in Peacebuilding* (pp. 41–58). Routledge.
- Pendlebury, J., Townshend, T., & Gilroy, R. (2004). The conservation of English cultural built heritage: a force for social inclusion? *International Journal of Heritage Studies*, 10(1), 11–31.
- Putnam, R. D. (2000). *Bowling alone: The collapse and revival of American community*. Simon and schuster.
- Rapoport, A. (1969). *House Form and Culture* Prentice Hall Inc. New York.
- Relph, E. (1976). *Place and placelessness* (Vol. 67). Pion London.
- Southworth, M., & Ben-Joseph, E. (2013). *Streets and the Shaping of Towns and Cities*. Island Press.
- Watson, V. (2009). 'The planned city sweeps the poor away...': Urban planning and 21st century urbanisation. *Progress in Planning*, 72(3), 151–193.
- Yin, R. K. (2009). *Case study research: Design and methods* (Vol. 5). sage.