

# Neighborhoods and Human Settlements: The Metamorphosis of Approaches from the Vernacular to Planned Settlements

Vineet Shrivastava<sup>1</sup>, Dr. Kamini Sinha<sup>2</sup>

<sup>1</sup>Research Scholar, <sup>2</sup>Associate Professor, Department of Architecture and Planning, National Institute of Technology, Patna, India.

Email: vineets.ph21.ar@nitp.ac.in, kamini@nitp.ac.in

Received	Accepted	Published
15.08.2023	15.11.2023	30.11.2023

<https://doi.org/10.61275/ISVSej-2023-10-11-08>

## Abstract

The idea of the neighborhood holds significant relevance to vernacular settlements, which were the origins of all human settlements. The notion of the neighborhood, distinguished by its focus on interpersonal connections and individual experiences, is intimately integrated into the social and physical framework of urban areas, embracing aspects of affiliation, collective memory, and underlying values. In transforming them, there has been a proliferation of planning movements since the commencement of the 20th century. Tracing the evolution of these movements will yield valuable insights into the development and progression of their fundamental concepts. Such movements of planning reveal both the social and spatial dimensions of human settlements.

This study examines the issue of technological advances, new viewpoints, and social changes that have affected the neighborhoods, since their origins as vernacular settlements. It examines how Neighborhood values and planning principles, such as functionality, equity, accessibility, privacy, and environmental compatibility, have been addressed in various global contexts in response to rapid socio-economic changes in urban regions.

It employs an analysis of academic literature. It uses content analysis as a research method to examine various theories about significant conceptualizations of Neighborhoods, and elucidates the hierarchical structure of them. It is suggested that the notion of Neighborhood contains diverse possibilities within urban planning. The potential benefits consist of optimizing land utilization within the immediate vicinity, facilitating the process of development and transformation, enhancing the overall perception of the city, effectively addressing, and resolving local concerns, and ensuring a cohesive relationship between the neighborhood's micro-scale and the city's macro-scale. The thorough consideration of elements such as proximity, flexibility, vitality, walkability, and collaboration is imperative in the realm of urban planning.

**Keywords:** Neighborhood, Planning movements, Neighborhood scale and Hierarchy.

## Introduction

Human settlements have been spatially divided into districts and Neighborhoods since antiquity (Friedmann, 2010; Smith, 2010), which signifies the importance of Neighborhoods in the fabric of a city. As a basic planning unit, Neighborhood has always been of particular interest to planners and urban visionaries (Rohe, 2009). During the initial decades of the 20th century, a multitude of theories and models emerged to enhance the overall quality and livability of residential communities.

There, has been a proliferation of planning movements since the commencement of the 20th century. Tracing the evolution of these movements will yield valuable insights into the development and progression of their fundamental concepts. The idea of the neighborhood holds significant relevance in such movements of urban planning as well as in studies and practices encompassing both social and spatial dimensions. The notion of the neighborhood, distinguished by its focus on interpersonal connections and individual experiences, is intimately integrated into the social and physical framework of urban areas, embracing aspects of affiliation, collective memory, and underlying values.

The field of neighborhood planning has existed as a scholarly discipline and professional practice since the beginning of the 20th century. However, the concept of sustainability and the sustainable neighborhood is a comparatively recent development. The sustainability of a neighborhood can be seen as a continuation of urban planning and design movements that began in the early 20th century with Ebenezer Howard's Garden City Movement to create more livable and environmentally friendly neighborhoods (Farr, 2008). This paper examines how the neighborhood sustainability paradigm came to be because of key planning and design movements. It explores the importance of the concept of sustainability, which has led to an increased discourse surrounding the fundamental principles of Neighborhood planning.

The paper aims to achieve a condensed knowledge of the evolution of Neighborhood concepts and their planning implications. Its objectives are:

1. To explore a critical analysis of the concept of neighborhood, highlighting its elusive and evolving nature over time
2. To emphasize the importance of physical definitions, organized local institutions, and communal activities in the design and development of Neighborhoods.
3. To analyze qualitative characteristics of neighborhood definitions
4. To critique Neighborhood planning initiatives and their influence on the planning profession
5. To highlight the importance of context in defining neighborhood.

## Review of Literature

The concept of the neighborhood emerged as a novel urban development during the era of industrialization in European and American cities. The examination of the historical development of the "Concept of Neighborhood" holds sociological implications that align with the endeavors of the Chicago School of Urban Studies & Ecology in the 1920s and 1930s. The work of Jane Jacobs, an American urbanist, and the core cluster theory proposed by Charles Horton Cooley are closely linked to the concept of the neighborhood unit as a residential community. However, the idea of the neighborhood unit was formulated earlier, during the reformist and Progressive milieu in Chicago, by architect William E. Drummond. His theory and terminology were widely exhibited and published between 1913-1922. In contemporary discourse, there is a growing contention that the concept of 'Neighborhood' is primarily associated with urban environments (Suttles, 1972). Moreover, it is commonly understood that the term only pertains to residential areas situated inside expansive metropolitan contexts (Barton H., 2000). In this context, 'Neighborhoods' mostly consist of residential areas, if not

entirely. As (Hallman, 1986) points out, the designation of a region as a neighborhood is contingent upon its occupation and utilization by its residents.

The concept of the neighborhood unit is commonly attributed to Clarence A. Perry in 1929, as believed by historians, sociologists, and city planners. He has expressed support for the installation of an elementary school in the neighborhood's civic Center. This is based on the belief that, due to its extensive reach within the community, the public-school functions as a unifying factor and thus provides the best basis for determining the size of the local community unit. According to C. A. Perry's proposal, the size or dimensions of a neighborhood should range between a half mile and three-quarters of a mile. This range is determined by the distance children can walk to reach an elementary school. According to the established definition, size is crucial to elucidating the fundamental concepts underlying the concept of neighborhood. However, the concept of a neighborhood encompasses more than size alone when endeavouring to define its boundaries. A Neighborhood is also defined by its intended functions within conceptual boundaries, which seek to foster a sense of homogeneity and promote social cohesion among its residents.

The concept of neighborhood in architecture and planning theory has evolved over time, with a shift from a humanistic approach to an instrumental approach and then to a phenomenological approach (Kallus and Law-Yone, 2000). Based on a comprehensive examination of prior research, it is evident that scholars in various fields have formulated distinct definitions that pertain to the concept of neighborhood. These definitions, frequently grounded in physical, functional, and quantitative frameworks, can be classified into three distinct dimensions based on the specific features they emphasize in relation to the notion of the neighborhood is presented in table no 01. The question of conceptualizing the definition of a Neighborhood and the pragmatic challenge of delineating its limits for the sake of research or practical application has garnered significant scholarly scrutiny in recent times (Chaskin, 1998; Galster, 2001; Downey, 2006). From a conceptual standpoint, neighborhoods can be understood as more than just physical spaces but rather as social constructs that are defined and delineated in various ways by different people. According to the study conducted by (Lee, Oropesa and Kanan, 1994) individuals possess flexibility in relation to Neighborhoods and establish their own activity space, which may not align with externally imposed geographic borders.

Furthermore, it has been argued by (Stedman, 2002) that individuals actively shape their perception of place and the way in which their neighborhood aligns with their social identity. The boundaries of neighborhoods, as perceived by individuals, are not fixed but rather subject to change and disagreement. Furthermore, the interpretation of places is influenced by social interactions, which play a significant role in shaping their significance for both individuals and groups (Gotham, 2003). According to (Gotham and Brumley, 2002), individuals have the option to either accept and appreciate the environment they reside in or reject some aspects of it. Despite being in close geographical vicinity, it cannot be presumed that all inhabitants share identical experiences of the locality. The evaluation of neighborhoods can be influenced by one's relative place in the social structure, which may be determined by factors such as age, color, class, or gender (Burton, 1997; Bohl, 2000a; Sampson and Raudenbush, 2004). Additionally, it is important to note that neighborhoods can vary in terms of their level of identifiability, which can be determined by factors such as the presence of natural boundaries, official demarcations, or widely recognized neighborhood names.

Another point made by (Stedman, 2002) is that people actively form how they see places and how their neighborhood fits with their social identity. People's ideas about the edges of neighborhoods are not fixed; they can change and be argued over. Social interactions also shape how people see places, and these interactions have a big impact on how important places are to both individuals and groups (Gotham, 2003). The formulation of neighborhood principles considered several criteria, including the need for traffic-free roads to ensure the safety of children and their proximity to schools. Additionally, the principles considered the fundamental and routine requirements of other household members.

**Table 1:** The Neighborhood Definitions and Characteristics of by Different Theorists  
Source: Developed based on (Park and Rogers, 2015; Ghaffari, 2018; Chookah *et al.*, 2021)

Dimensions Theorist	The Physical Characteristics of the Neighborhood	The Functional Characteristics of the Neighborhood	The Social and Demographic Characteristics of the Neighborhood
Ebenezer (1898)	➤ 100 Acres	➤ Primary School ➤ Others (library, religious worship, concerts)	➤ Population: 5000
Nelson (1945)		➤ Nursery, play lot, social rooms. ➤ Convenience shopping	➤ Population: 1,200–5,000 ➤ Social Spaces in the Neighborhood
Clarence Perry in 1930s (Walters, 2007)	➤ 60-Acre Area ➤ ¼ Mile Radius ➤ Using Main Street as a Neighborhood Boundaries ➤ Emphasis on Neighborhood Center	➤ Open Public Spaces, Local Parks, Local Institutions & Stores ➤ Accessibility to All Public Services and Facilities Residents Need	➤ Population: 5000-9000 ➤ Applying Urban Design Qualities to Improve Local Identity and Sense of Community
Angel Heart (Baily, 1959)	➤ 1/2 Mile Radius and ¼ Mile Distance of School	➤ Playground, Day Care Centers, Schools	➤ Population: Approximately 6000
(Hoppenfeld, 1967) (For Village Planning in Maryland, 1967)	➤ 200 – 500 Acre Area	➤ School, Retail Stores, Playground and Pool, Day Care, and Facilities for Mothers and Young Children	➤ 3000 – 5000 Population
Habibi & Masaeli, 1999	➤ Approximately 300-375 Meters Radius	➤ Mosque, School, Daily and Weekly Facilities and Services (Commercial, Sport, Leisure)	➤ Population Approximately 3500-5000
Suzanne Keller (1968)	➤ Focus on Geographical Boundaries		➤ Combination of Geographical Boundaries with Ethnical and Cultural Characteristics of Residents and Psychological Unity
Marans and Rodgers, 1975	➤ Environed by Main Streets	➤ Elementary School as a Critical Landmark	➤ Like a Planned Community
Glaster & Hesser, 1982	➤ A District Including Many Allied Blocks, Environed by Perceived Boundaries such as Topographical Boundaries and Transport Lines		➤ Homogeneous Social and Economic Characteristics of Residents
Chaskin, 1997	➤ A District Including Few Blocks	➤ Daily Services and Functions like the Church	➤ A Primary Unit to Create Identity and Local Social Nodes
Duany and Zyberk 1994 (New Urbanization Theory) (Farr, 2007)(Cowan, 2005)	➤ ¼ Mile Radius (Approximately 5 Min certain Neighborhood center)	➤ Elementary School in Neighborhood Center, Public Transportation	➤ Balanced Combination of Human Activities, Social Mix

Calthorpe, 1993 (TOD Pattern) (Farr, 2007) (Grant, 2006)	➤ Semi-circle Form District, 160-acre Area, 10 Min Walking radius to Public Transportation Station	➤ Mixed Functions, Mixed Residential Patterns, Considering Streets Hierarchy	➤ Creating Unity Among Different Ages and Social Groups, Creating a Sense of Place
(Stephenson, 2002) West Palm Development Plan	➤ 5 Min Walking Distance from the City Center	➤ Educational and Cultural Center, Park, commercial areas and Offices	➤ Population: 1800
Urban village Theory (Neal, 2003)  Magnaghi & Kerr, 2005	➤ Emphasis on the Space as a Neighborhood Center	➤ Mixed Uses, Mixed Residential Patterns, Necessary Services and Facilities and Appropriate Walking Distance of Residential Units	➤ Residential Participation in the Planning and Management of NBD ➤ Neighborhood Center as a Civic Space for Social Relations and Public Gathering
Spreiregen and De Paz, 2006	➤ Approximately 3 Miles Radius ➤ Approximately 18000 Acre Area	➤ Drugstore, Automobile Services, Supermarket & Daily Services in Neighborhood Center	➤ Population 7500-20000
American Planning Association, 2006	➤ More Than 3 Face-blocks	➤ Park, Public Spaces, Services ➤ Center	➤ Appropriate to Evoke Direct Resident Participation Rather than Appropriate for Economic Development
Gibbs, 2011	➤ Approximately 1/5 Miles radius	➤ Daily Services Like Drugstore and Bakery	➤ Population - 2000
Leed rating system (US Green Building Council, 2006)	➤ Almost 320 Acre	➤ Civic and Public Spaces, Mixed Uses, Public Transportation	
Park and Rogers, 2014	➤ 125 – 500 Acre Area	➤ Central Activity Points Like Schools and Parks, Retail Stores and Daily- Weekly Services and Facilities	➤ Homogeneous Socio-Economic Characteristics of Residents, Similar Economic Values of Houses ➤ 500-5000 Population
Vidyarthi, 2010 (For Delhi master plan in 1962)	➤ Including 4 -6 Acre	➤ School, Daily and Weekly Stores	
Khashayar and Ali 2018	➤ Streets and Traffic Arterials, ➤ Natural Elements ➤ Perceptible Area for Residents	➤ Providing daily and weekly needs ➤ Appropriate Access	➤ Social Distinctions (Racial, Ethnic) ➤ Residents Participation

The establishment of a neighborhood boundary was implemented with the objective of effectively accommodating a population ranging from 500 to 1000 individuals while ensuring a walking radial distance of no more than half a mile for each resident, particularly children.

The concept of neighborhoods holds significant relevance in the field of urban studies, yet a universally accepted and accurate definition for this term is currently lacking (He and Wu, 2007). Four main criteria emerged after an exhaustive assessment of relevant scholarly literature concerning the concept of neighborhood: geographical elements, political influence, communication, and a sense of identity. Geographic aspects of the neighborhood include natural and manmade features and their limits (Flowerdew, Manley and Sabel, 2008). The term

"political influences" refers to external factors that shape resource distribution and community structure within and between neighborhoods (Galster et al., 2001; Weiss et al., 2007).

In many literary works, a neighborhood is depicted as a distinct place from its surroundings. Nearness to regional attractions including job centers, retail stores, and entertainment venues defines proximity (Archer, S., & Fletchman, 1975; Galster *et al.*, 2001). Study of (Milbrath and Deguzman, 2015) "Neighborhood 351," found that a Neighborhood's natural environment defines and promotes health. According to (Galster, 2001) railroad tracks, major roads or highways, rivers, lakes, and other natural monuments divide adjacent neighborhoods. Neighborhoods can be distinguished by external political variables that influence the allocation of resources and the imposition of perceptions. The allocation of local political resources has a pivotal role in determining several variables that are essential for the well-being and success of a community, such as the provision of safety forces, administrative services, educational institutions, public transit, and recreational areas.

An important aspect of a neighborhood is the interactions between neighbors. Social capital is a typical characteristic of neighborhoods in sociological literature (Flowerdew, Manley and Sabel, 2008; Hanibuchi *et al.*, 2012). Neighborhoods have an explicit and implicit identity and the degree to which neighbors experience this social ownership and identity changes within and between neighborhoods. People frequently look for regions with comparable race, socioeconomics, demography, education levels, and other characteristics while moving. Neighborhoods become more homogeneous when people acquire others' traits (Galster, 2001). local borders are generally based on local homogeneity and heterogeneity (Weiss *et al.*, 2007; Hipp, Faris and Boessen, 2012)

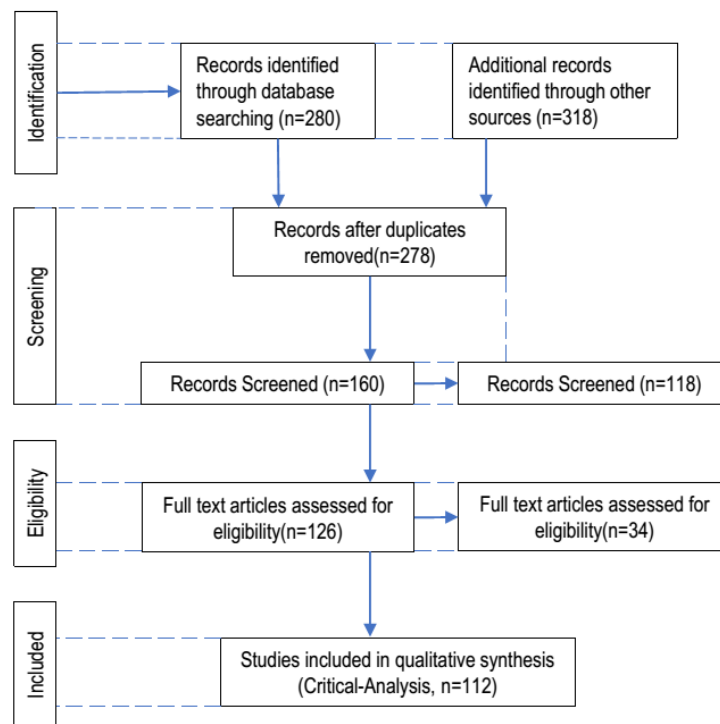
The notion of neighborhood is employed across a range of academic fields, encompassing community psychology, health promotion, sociology, community health, medical geography, urban planning, social networking, social science, and medicine. Various disciplines prioritize distinct characteristics of the idea. For instance, the field of urban planning and geographic literature places greater emphasis on the delineation of boundaries and the examination of physical attributes inside neighborhoods (Haynes, R., Daras, K., Reading, R., & Jones, 2007). Nevertheless, the disciplines of sociology and psychology are primarily concerned with examining the dynamics and relationships among individuals residing within a certain community (Lamont and Molnár, 2002; Hipp, Faris and Boessen, 2012).

In planning contexts, it is characterized as a functional unit that provides residents with various services and amenities (Howard W. Hallman, 1984; Barton, H., Davis, G., & Guise, 1995). These meanings exemplify a primary challenge in the utilization of the term. The term "Neighborhood" encompasses two distinct dimensions: a district, which refers to the physical boundaries and characteristics of a particular place where individuals reside, and a community, which pertains to the social interactions and relationships among the individuals inhabiting that area (Briggs, 1997; Galster, 2001)

The neighborhood idea is a tool that fulfils subjective needs stemming from the ideological dispositions of professionals in society rather than just objective needs in city planning. A neighborhood is commonly seen as a residential area that also has workspaces and a familial atmosphere. Within various societal contexts, individuals engage in diverse forms of social interaction. These interactions serve distinct purposes, including utilitarian exchanges such as those observed in grocery stores, medical clinics, schools, and recreational parks. Additionally, individuals may engage in interactions for the purpose of seeking support or mutual aid, often involving the trade of services. Lastly, socialization plays a crucial role in fostering interpersonal connections and the establishment of relationships among individuals. This environment is familiarized through the process of navigating and engaging in social and economic endeavors, such as socializing with acquaintances and engaging in commercial transactions. The architectural environment and its social organization have the potential to foster a sense of familiarity and play a role in shaping one's identity. In essence, a neighborhood is defined as a locality distinguished by a distinct assemblage of spatially oriented attributes that are present within a certain geographical scope.

## Research Methodology

The paper applies the content analysis research method to analyse important neighborhood definitions from different viewpoints and theories. It provides a comprehensive assessment of the literature pertaining to significant neighborhood planning movements that emerged during the early 20<sup>th</sup> century. The authors review the literature on various forms of Neighborhood planning, examining their historical development and influence on the planning profession. The historical analysis approach is also utilised to examine the origins and evolution of the neighborhood planning movement over time. It draws on a range of primary and secondary sources, including scholarly articles, books, and historical records. The method also incorporates the perspectives and arguments of various scholars and researchers in the field of urban planning and neighborhood studies.



**Fig. 1:** Flow Diagram of the selection process of research papers  
Source: Author

The main research databases such as Scopus, web of Science and Google Scholar were used to identify relevant research output. In the first step, the keywords "Neighborhood movement", "Physical characteristics of Neighborhood", "Functional characteristics of the Neighborhood and "Social and Demographic characteristics of the Neighborhood." were searched for in the database. The first step resulted in 280 research output, which then increased to 318 through the identification of other sources referenced in the initial research outputs. In the second step, by culling the common results and investigating the abstracts, the studies that were not in conformity with the research questions were removed. The duplicates were removed (in step 3), and the most relevant research for neighborhood planning and development was considered. Finally, after removing duplicates and applying the inclusion and exclusion criteria, 112 publications were selected for the review. Research papers not considering the below criterion were the reason for exclusion in (step 7)

- First, it was intended to focus on those movements that address various planning aspects and have physical planning as the main element.
- The second criterion was to select influential movements that have been practiced in several countries.

The selection process of research papers for review purposes is presented in Fig. 1. The paper analyses and synthesises the findings and perspectives from the reviewed literature to develop an understanding of the neighborhood perspective.

## Findings

### What is Neighborhood?

According to literature, the concept of a Neighborhood holds significant importance in the realm of urban development, serving as a key unit that shapes not only the physical landscape but also serves as a prominent manifestation of the cultural aspects of its inhabitants (Hameem *et al.*, 2023). A Neighborhood can be defined as a built entity that encompasses the daily experiences of a specific group of residents inside a clearly delineated geographical area. Neighborhood sustainability, on the other hand, refers to the ongoing efforts to cultivate and maintain an environment that effectively caters to the economic and social requirements of its people (Wijesundara, Weerasinghe and Perera, 2021)

Neighborhoods have garnered considerable attention from city planners, architects, and urban designers. The concept has persisted for an extended duration, garnering attention from both scholars and practitioners together. However, the true essence of this concept appears to be elusive. The connotations associated with the concept are perpetually deconstructed, rearranged, and reconstructed in accordance with the given circumstances. Indeed, the existing scholarly works provide valuable insights into the basic conceptualizations and definitions of a "Neighborhood", as an 'important organ of urban life' in which people are bound together, interlinked, and live inter-dependently like all living organisms (Mumford, 1954). Other such definitions include the following.

- "a combination of geographical boundaries, ethnic or cultural characteristics of the inhabitants, psychological unity, or concentrated use of an area's facilities" (Smith, 1969)
- "a small urban area where residents are influenced by socio-economic effects and services within" (Goodman, 1977)
- "a sub territory of a larger area in which people reside and interact with each other" (Hallman, 1984)
- "a geographical unit where inhabitants can share access to construction within" (Chaskin, 1998)
- "a collection of spatially based attributes associated with clusters of residences, sometimes in conjunction with other land uses" (Galster *et al.*, 2001)
- "a particular form of social reproduction where human activities, including daily life, social interaction, and political and economic commitment, take place."

(Martin, 2003)

A Neighborhood is a group of people who live together and use the same services in a geographically defined area. People, place, and cohesion are the three main words that describe Neighborhoods. The location is the most distinguishing word between neighborhoods and other terms such as community which also refers to a group of people who share the same values, beliefs, circumstances, interests, and culture no matter where they live (Chaskin, 1998). In contrast, neighborhoods possess a concrete and discernible spatial framework that can be effectively employed for various planning objectives. These encompass several aspects such as strategic analysis, service planning, delivery mechanisms, intervention strategies and other related factors. Understanding the geographical and physical characteristics of a neighborhood holds a significant importance in the context of neighborhood-level planning and research.

### Meaning of Urban Neighborhoods in India

The concept of "Neighborhood Units" as designed micro-units of human settlements may be traced back to the adoption of the "locality principle" by urban planners. This principle serves as a method to foster and sustain a sense of cohesion and fellowship within socio-economically different communities. Interestingly however, this artificial creation of



territoriality does not work in the Indian context, because the fabric of human relationships that evolve over generations of social communication and assimilation in the so-called "unplanned" Jati or endogamous caste enclaves called 'Mohalla's' cannot be replicated.

The term "Mohalla" not only denotes a limited spatial dimension but also incorporates a whole spectrum of familial and socio-cultural connections among its inhabitants. It is one large extended family in this sense. People come together not because they are forced but because they want to. In fact, the rich Mohalla setting is typical of Indian traditions. In this connection, Fonseca states:

"Life here is governed by social contact structures that are more consistent with 'inhabitants' lifestyles' than with the sterile images of planners and architects resulting from obsolete conceptions of planning and spatial environment manipulations".

(Fonseca,1969: ?).

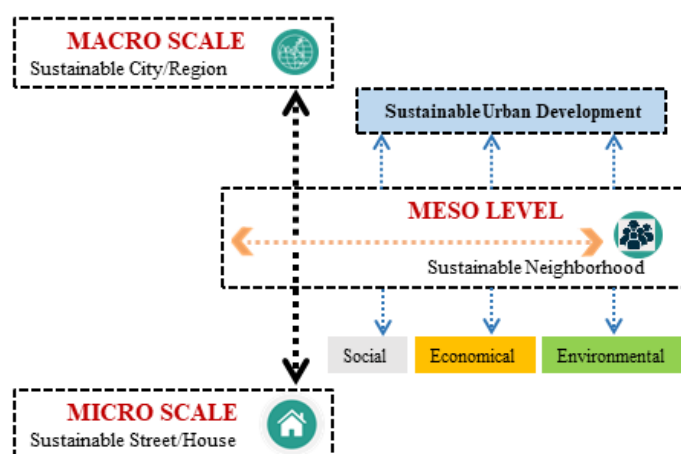
The "Mohalla" is an example of earning-based spatial restructuring. Gupta claims that the new economic basis of communities have created a new "caste structure," which undermines the community spirit (Gupta, 1974). Their creation is a long-term process involving several generations. Each area is often identified with certain cultural factors and a specific system for regulating life. Until recently, a notable share of urban planning initiatives has consisted of urban projects that can be described as "demolish and redevelop." As a result, conventional settlements were eradicated, leading to the disappearance of communities and the loss of their inherent sense of place. Moreover, there is a need to alert geographers, urban planners, and architects against ignoring the Indian Mohalla's cultural foundations to build new spatial frameworks that are considered to be compatible with the contemporary needs.

### **Neighborhood: The Significance of Scale**

The built environment is where human activities are undertaken, and any size, from the smallest shelter, a room, or a house to a larger city or area, will have an effect on overall sustainability in a certain way (Bijoux & Pathway, 2012). A neighborhood is the smallest unit in the city's social and political organization and the main action center (Hemani and Das, 2016). This urban dimension holds significant importance as individuals engage with it both physically and socially within the context of their daily lives.

Neighborhoods can be described geographically as houses, areas surrounding them, and facilities from an individual perspective. The establishment of a sustainable neighborhood necessitates the incorporation of sustainable practices and principles in all aspects of its composition. Simultaneously, every neighborhood in a city should operate sustainably to achieve overall urban sustainability (Hameem *et al.*, 2023). Researchers consider a neighborhood as an important scale for urban administration and urban governance and a way to deal with social issues such as exclusion, poverty, and gentrification (Durose and Lowndes, 2010; Harris, 2016) Today, neighborhoods are regarded as places of engagement and social rights for communities that allow sustainable development to take place (Hemani and Das, 2016). This increased emphasis on communities is due to several causes, including the following:

- There is an increasing apprehension regarding the alteration in the societal structure and decline in interpersonal connections inside urban areas, which can be attributed to the processes of globalization and fast urbanization. There is a growing emphasis on quality-of-life and its evaluation, where neighborhood scale is the most useful facet to explore to understand them.
- It is found that neighborhoods affect individual well-being as well as collective well-being.
- Local communities are significant contributors to social stability and economic competitiveness of cities.
- There has been a growing interest in bottom-up approaches and a growing realization that the sustainability of micro-scale systems is influenced by macro-scale factors which are of city or regional level (Crane *et al.*, 2021)



**Fig. 2:** Neighborhood scale significance.  
Source: Author

### Hierarchy of Neighborhoods

Neighborhoods can be classified on a variety of scales, depending on their size, degree of cohesion, and availability of common services. Literature offers a neighborhood hierarchy based on characteristics including physical conditions, social connections, and political voice. In fact, the state of one's physical setting is frequently cited as a factor in determining the order of a neighborhood.

Nelson (1945) has conducted a study to classify neighborhoods based on the services they provided. Four layers of neighborhoods, each with four or five neighboring units from the bottom level, were introduced by Nelson, inspired by Perry's Neighborhood Unit. The following characteristics are also noteworthy about neighborhoods.

- A residential neighborhood refers to a community of individuals residing in close proximity to establishments that offer various services aimed at helping families with children. These services may include a nursery, a playground, a dedicated area for parental education, a common area for social interaction, or a convenience store. The population of the area is approximately 1,200.
- A neighborhood, which often includes playgrounds, community centers, community spaces and shops, develops around an elementary school. It's essential to at least have 5,000 people living there.
- The district includes a secondary school with play areas, auditoriums, gymnasiums, social and culture centers, shopping centers, and health centers all around it. It is suggested that the number of people living in this area of a Neighborhood should be at least about 25,000.
- A section refers to the largest and most comprehensive segment. It is plausible that a junior college may incorporate other amenities, such as a cultural center, social and recreational facilities, a public administrative building, or health infrastructure. Population at this specific level reaches a total of 75,000 individuals.

Marans (1975) has used physical factors to classify the neighborhood into three levels.

- An urban micro-neighborhood is comprised of no more than six or seven adjacent houses and is referred to as such because of its small size.
- The presence of an elementary school bounded by major roads signifies a macro-neighborhood. As a planned community, it is far larger than a micro-neighborhood.
- The term "political jurisdiction" is commonly employed to refer to a collective entity that encompasses a geographical area surpassing that of a macro-neighborhood.

For the purpose of planning, the American Planning Association (2006) provides more specific physical requirements for each level of neighborhood, depending on Chaskin (1998) and Suttles (1972). They are as follows.

- Face blocks are defined by residences and two street sides between crossings. Face-block physical proximity between neighborhoods encourages personal and social connections but is insufficient to influence more comprehensive development initiatives.
- Several Face blocks make up a residential neighborhood. Parks, public spaces, business districts, and transportation are common features of residential neighborhoods. It is a good planning unit for inhabitants, but not for systemic changes like economic development or institutional collaboration.
- Residential areas are part of institutional neighborhoods. There are various official institutional restrictions on them. They must have adequate spaces to accommodate banks, government agencies, schools, hospitals, and clinics.

Similarly, Chaskin (1997), citing Suttles (1972) has divided the neighborhood hierarchy into four divisions.

- A face block refers to a localized network neighborhood. The residents of the community utilize shared amenities and engage in interpersonal interactions that range from close to casual. The ambiguity of a physical boundary might be observed in this context.
- A neighborhood that is protected is the center of local identity and connections. It is a 'secure place' for its members (Chaskin, 1997). Different defended neighborhoods have various sizes. It might be a larger region or just a few streets around a house, but it must have amenities like a church and a grocery store.
- A municipality or any other organization can set a border for a community of limited liability. Thus, an "institutional neighborhood" is an administrative entity which provides services for day-to-day life.

### **Four Levels of Neighborhoods**

A hierarchy of neighborhoods is described in the existing literature as elucidated in figure no 2 suggested by (Park and Rogers, 2015). However, the nomenclature and classification systems propagated by different researchers differ from each other (Suttles, 1972; Chaskin, 1997). The process of classification involves the consideration of several physical criteria, including population size, local facilities, and recognized boundaries. Additionally, the composition of socio-economic features, such as ethnicity and life cycle, as well as the strength of informal networks are considered. There are four distinct levels of categorization that warrant investigation.

#### **Level 1**

The term "face block" refers to the most basic and fundamental element inside a neighborhood. The community consists of closely interconnected residences. The size of the Face-block is insufficient to effectively organize and amplify a political voice. Therefore, it can be concluded that the utilization of face-block is not appropriate for the purpose of physical planning. (Park and Rogers, 2015)

#### **Level 2**

Face blocks form a residential neighborhood. Neighborhoods are geographically and economically homogeneous. In both cases, the streets and buildings are similar. Housing values and life cycles frequently match, providing a reasonably homogeneous atmosphere. If it has an elementary school or a small retail store, it is ideal. (Park and Rogers, 2015)

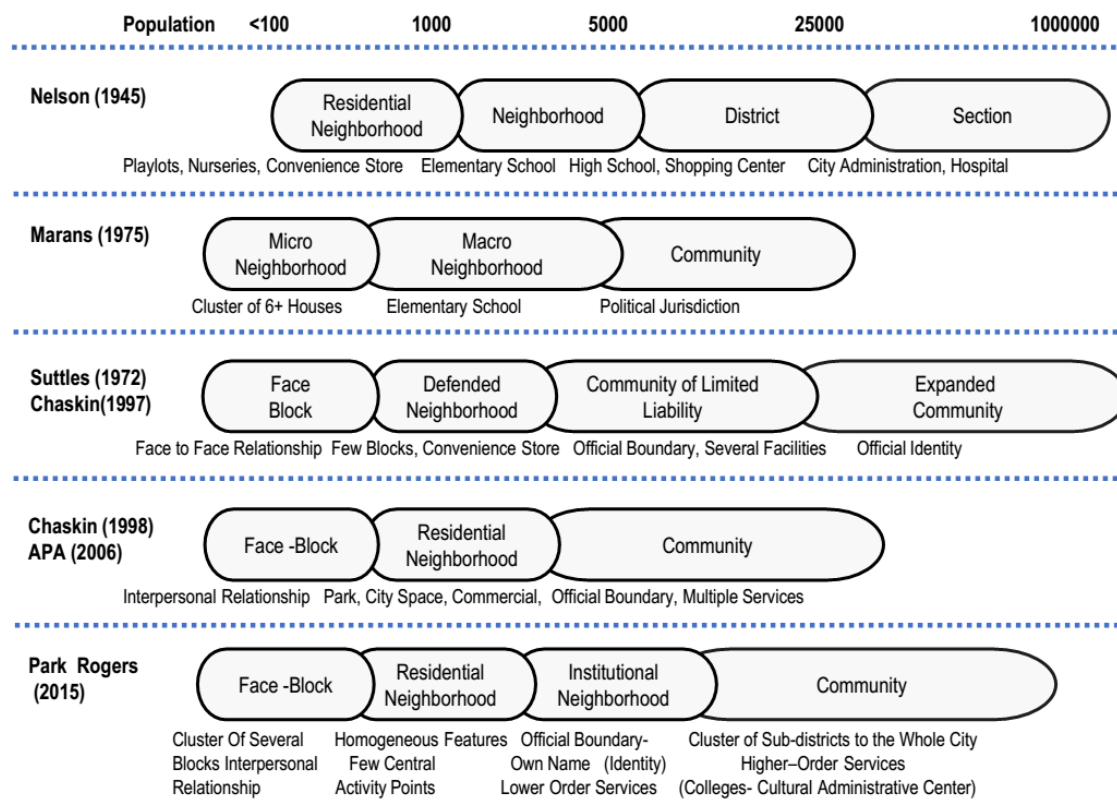
#### **Level 3:**

An institutional neighborhood is made up of residential areas. The area encompasses educational institutions, healthcare facilities, leisure, and community facilities, as well as

business establishments. The entity possesses a designated nomenclature and a formally recognized or governing demarcation.

#### Level 4:

A community refers to a substantial aggregation of districts within an urban area, occasionally including the entirety of the city. Cultural, administrative, and educational centers are commonly established to cater to the needs of both locals and visitors. The extant body of literature suggests a set of criteria that provide a hierarchical structure for neighborhoods, while there are variations in the classification techniques and terminology employed. Four potential levels of classification are proposed based on various physical characteristics, such as size, local amenities, and recognized boundaries. Additionally, the composition of socioeconomic features, including the homogeneity or heterogeneity of income, life cycle, and ethnicity, are also considered.



**Fig. 3:** Comparing Relative Levels of Neighborhoods.

Source: Adopted and developed from Park and Rogers, 2015

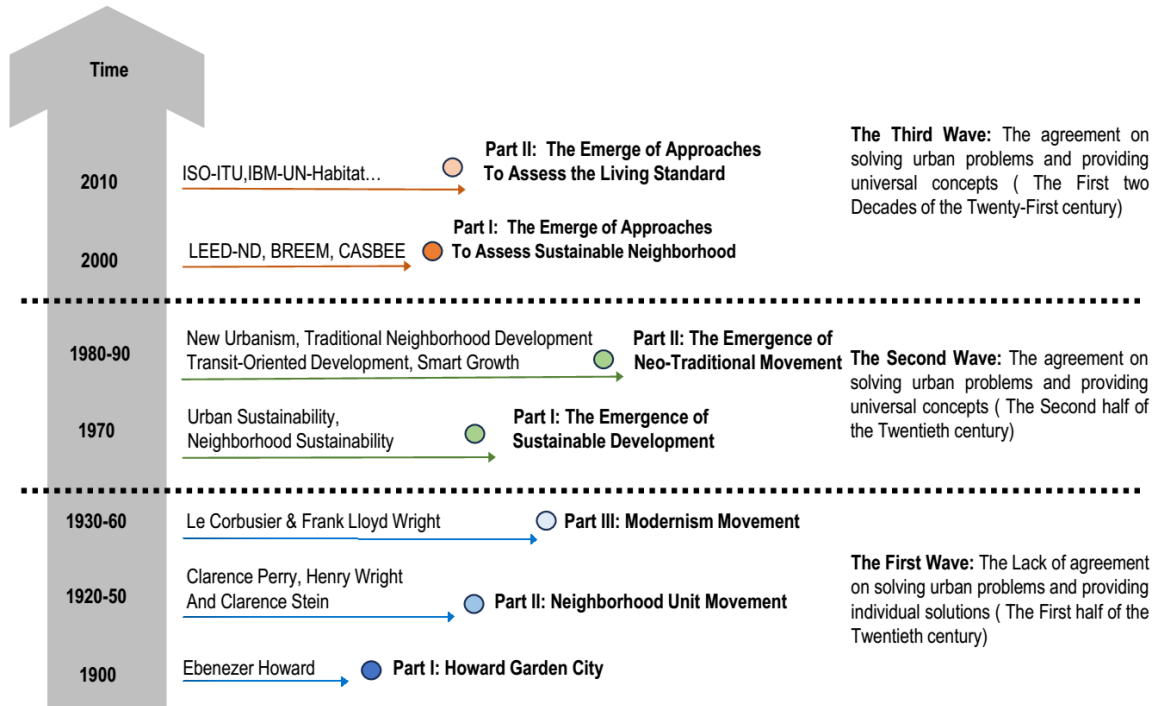
### Evolution of Approaches to Neighborhood Planning

After the Industrial Revolution and massive social and economic changes in the Western country's major cities' socioeconomic and spatial mix changed. After these changes, different community planning methods were established, and many intellectuals outlined their ideal society. Proposed residential complexes included work and living areas. These residential complexes were designed to promote unity, solidarity, social equality, public engagement, and cooperation between residential and service areas. Some of these programs were enacted, but their underlying substance and extreme idealism prevented them from succeeding. Various physical models have been designed to encourage community and study their impact on neighborhood patterns throughout time. The present review ponders over concepts and proposition models that address urban concerns caused by urbanization. The emphasis is on neighborhood development, which has changed significantly over 150 years. Three waves characterize these transitions.

## Theoretical Basis

In the past, there existed several prominent attributes associated with the initial wave. The lack of agreement on how to address urban difficulties and provide tailored solutions throughout the early years of the twentieth century gave rise to the following concepts.

- Howard Garden City movement
- Neighborhood Unit movement
- Modernism movement (Hameem *et al.*, 2023)



**Fig. 4:** Three significant waves of the evolution of paradigms, theories, and approaches in the face of urban challenges of urbanization

Source: Hashemi, Alireza, Taghvaei and Reza, 2018

## Howard Garden City

Radical and utopian views of urban visionaries have affected urban planning during the first half of the 20th century. The Garden City idea by Ebenezer Howard, which launched this new era of utopian thinking, was one of the early attempts in this subject. Most urban scientists gave Howard and his planned garden city model much credit for the inception of contemporary urban planning. Later, scholars including Lewis Mumford, Clarence Stein, Henry Wright, and Patrick Geddes were influenced by his utopian outlook (Hirt, 2007). Garden City served as an inspiration for neighborhood units and modernism as well (Ward, 2005; Domhardt, 2012). Cities, according to him, are human societies that draw work to them like a magnet. One of the first attempt at neighborhood-based planning was the "wards" idea utilized in the Garden City movement (Mumford, 1954; Minnery *et al.*, 2009)

## Neighborhood Unit Movement

Perry's (1929) ideas were beyond spatial arrangements, and one of his primary concerns was the participation of the citizens. Perry, in neighborhoods theory, argued that vital and necessary services should be situated near residential areas; he argued that the social and physical realm of neighborhood units should provide opportunities for face-to-face contact and increase the sense of community among residents (Lawhon, 2009)

## Modernism Movement

Technological developments in the building and transport sectors sparked several rational planning paradigms known as the modernist movement. The modern neighborhoods included superblocks with internal pedestrian networks, high-rise functional buildings, lots of open spaces, and contemporary high-speed public transportation. Modernism, a well-designed urban form, according to influential thinkers like Le Corbusier and Frank Lloyd Wright, could solve the urban problem. They intended to provide prosperity to the inhabitants through an urban pattern distinct from the preceding movement, except for "socialist or social democratic countries". Modernist theories were rarely tested and were mostly destroyed (Rohe, 2009)

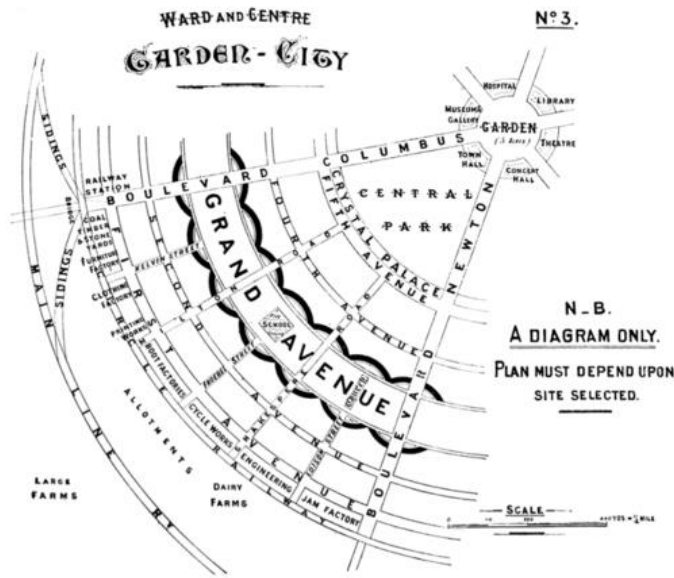


Fig. 5: Wards diagram of Howard's Garden City concept  
Source: Howard,1902

## The Second Wave

During the second half of the twentieth century, this wave developed consensus on addressing urban issues and developing applicable frameworks. They included:

- Emergence of Sustainable Development movement
- Emerge of the Neo-Traditional Movement

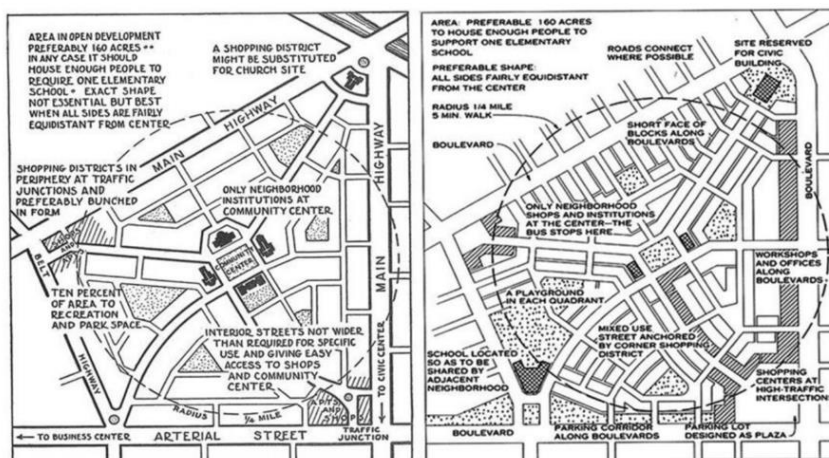


Fig. 6: Neighborhood Unit

Source: Clarence Perry, 2011(left), updated by Duany, Andres.Plater-Zyberk and Speck, 2000)(Duany, Andres.Plater-Zyberk and Speck, 2000)(right).

**Emergence of sustainable development.**

Due to rapid economic growth in the second part of the twentieth century, many rural residents moved to cities. A global decline in environmental quality and economic equality has been attributed to shifting social and cultural values, inadequate housing, and excessive resource consumption (Weiland, 2006).

Initially, sustainable development centered on environmental degradation and environmental concerns. After the World War II, the idea of sustainable development evolved to encompass sustainability on all fronts, including the economic, social, and environmental fronts (Packalén, 2010). The implementation of the neighborhoods as an "Urban Life Cellule" has prompted a focus on sustainable development within the framework of community development at the local level. This approach aligns with the concept of "Think global, act local" as proposed by Khatibi, Khaidzir and Mahdzar (2023). Barton argues that to achieve the triple goals of health, equity and sustainability, realistic neighborhood forms and functions are essential. He suggested that neighborhoods are integral components of urban areas and they are inherently intertwined with the entirety of the city Barton, Grant and Guise (2006)

**Emergence of the neo-traditional movement**

In the 1980s, neo-traditionalism, a postmodern urbanist architectural style, was promoted as a potential solution to problems associated with a range of urban living issues. Figures like Duany, Plater Zyberk, and Calthorpe paved the way for Neo-traditional planning in the United States (Sharifi, 2016a). The concepts of neo-traditionalism and modern urban planning, which have garnered significant attention subsequent to the Congress for New Urbanism (NTU) in 1993, are occasionally employed interchangeably. (Hamid Mohebbi, 2022)

New Urbanism, Traditional Neighborhood Development, Transit Oriented Development, Urban Village, and Smart Growth are only a few of the Neo-traditional planning strategies that gained popularity in the latter decade of the twentieth century. These methods have been put to use in the planning procedure with the purpose of articulating and enacting Neotraditional ideas. The implementation of neo-traditionalist methodologies results in the development of structures, neighborhoods, and regions that enhance the overall well-being of citizens, while concurrently addressing the preservation and sustainability of the natural environment (Serag El Din *et al.*, 2013).

The Charter of New Urbanism proposed design principles which encompass a set of fundamental aspects. Neighborhoods should be distinct in population and use. Communities ought to be planned with equal consideration for pedestrians, transit users, and automobile traffic. (Hashemi, Alireza, Taghvaei and Reza, 2018)

The design of urban spaces should incorporate architectural and landscape elements that reflect and highlight the local context, historical significance, climatic conditions, ecological considerations, and building traditions. (Abd Elrahman and Asaad, 2021). The concept of New Urbanism aims to counteract the expansion of suburban areas and the deterioration of inner cities by implementing design-focused tactics that emphasize traditional urban structures. Its objective is to construct new neighborhoods or revitalize existing ones. (Bohl, 2000b)

**Third Wave**

During the twenty-first century's first two decades, the third wave as a set of assessment criteria and indicators were derived from universally applicable concepts. This involved the emergence of various methodologies for evaluating the sustainability of the neighborhoods.

**Emergence of Approaches for Assessing Sustainable Neighborhoods.**

At the dawn of the twenty-first century, methods for assessing a community long-term viability arose. Based on the sustainability evaluation system, this approach aimed to create a framework for urban development projects in the realm of sustainability issues using specified criteria and indicators.

- Various sustainable building rating systems have been established globally, each with its own set of criteria. For instance, LEED-ND was introduced by the United States

Green Building Council (USGBC), CASBEE for Urban Communities was recommended by the Japan Green Build Council, and BREEM Communities (BREEAM, 2012) was developed by the UK Building Research Establishment (Dall'O' *et al.*, 2013)

- According to the United States Green Building Council (USGBC), a neighborhood can be defined as a geographical region encompassing residential, commercial, and civic establishments, together with their immediate surroundings. This definition emphasizes the significance of inhabitants' and employees' identification with the economic and social attitudes, lifestyles, and organizations prevalent within the neighborhood.
- The LEED-ND certification places significant emphasis on the development of compact, pedestrian-friendly, dynamic, mixed-use neighborhoods that are effectively connected to the surrounding communities. When analyzing urban environments, it is crucial to evaluate several elements such as neighborhood morphology, human scale, mixed-use development, geographical positioning, and the effectiveness of infrastructure and structures (Council, 2006)

### **Emergence of Methods to Evaluate the Standard of Life.**

- The past decade of the 21st century, a multitude of studies have been conducted globally to tackle the complexities of urban existence. These endeavours have resulted in the development of indicators that can be utilized to assess the efficacy of urban centers and enhance the quality of life inside them.
- In 2013, UN-Habitat established a comprehensive framework consisting of five key criteria, namely productivity, infrastructure, quality of life, equity, and environmental sustainability, with the aim of improving the overall urban living conditions. A City Prosperity Index (CPI) has been proposed as a metric for assessing levels of prosperity within urban regions.
- According to UN-Habitat, prosperity is a concept that is socially constructed and has been seen within the context of human behaviors and activities. This concept is predicated upon the objectives that are prevalent within a given urban setting, regardless of its geographical location or size. Prosperity encompasses a comprehensive and extensive concept that pertains to the equitable and advancement of well-rounded development within a given context (Ben Arimah and Abdallah Kassim, 2013)

### **Evaluation**

This paper investigates the development of neighborhood planning movements from the early 1900s to the present. Planners and visionaries have been instrumental in the development of planned neighborhoods to address the challenges posed by uncontrolled urbanization for more than a century. The previous section examined Four key movements. Table 1 outlines the key features of these movements. Table 2 encompasses a multitude of sustainability-related criteria and denotes the extent to which these criteria are integrated into the fundamental principles of the identified movements.

The concept of neighborhood planning has undergone a transformation, shifting its primary emphasis from 'city beautiful movement' and enhancing the quality of life to addressing sustainability concerns such as inclusivity, climate resilience, effective resource utilization, and carbon management. This shift is achieved by modifications in urban design and the integration of green infrastructure. The five approaches to constructing ideal neighborhoods differ in their historical origins, approaches, aims, and activities. Several of these ideas and traits have recurred in various movements, while others have evolved since the late twentieth century's environmental and sustainability challenges. These concerns are of notable importance and hence demand careful attention and contemplation. Subsequently, there has been a significant paradigm shift in the underlying processes that delineate urban areas and residential communities.



**Table 2:** Main features of different movements

Source: Adopted from Sharifi 2015

Item	Garden City	Neighborhood Unit	Modernism	Neo-Traditional
The Primary Motivating Factor	EU and NA	EU and NA	EU and NA	EU and NA
Density	Low	Low	Very high /Very low	Medium-High
Street Typology	Curvilinear	Radial/Linear	Rigid Grid	Flexible Grid
Street Pattern/Connectivity	Low	Low	Low	High
Transportation Mode	Private	Private	Private	Multi-modal
Integration with Landscape	✓	X	NX	✓
The Integration of Pervasive Technology	✓	X	X	✓
Low Carbon Footprint and Carbon Offsets	X	X	X	✓
Focus on Climate Resilience	X	X	X	✓
Participation of International Governmental or Quasi-Governmental entities	X	X	X	✓
Performance Evaluation Tools	X	X	X	✓

**Table 3:** Degree of Incorporation of Sustainability related Criteria in the Studied Movements

Source: Adopted from Sharifi 2015

Themes and Criteria		Garden City	Neighborhood Unit	Modernism	Neo-Traditional
<b>Social</b>	Inclusive Neighborhood (Demographics, Affordability, etc.)	Y	Y	Y	Y
	Civic and Community Places	Y	Y	X	Y
	Local Language, Culture, Tradition, Identity	X	X	X	Y
<b>Economic</b>	The Proximity to Work and Residence	Y	X	X	Y
	Being Self-Sufficient	Y	Y	X	X
<b>Environmental</b>	Location and Site Choice (sensitivity to site)	X	X	X	Y
	Resource Management (using energy, water, materials, trash, etc. in a clean and efficient way, etc.)	X	X	X	X
	Protecting the Environment (ecology, wildlife, etc.) is important.	X	X	X	X
	Green area	Y	Y	Y	Y
	Neighborhood Sustainable Transport (public transit, cycling)	X	X	X	Y
	Sustainable buildings and communities certified	X	X	X	X
<b>Institutional</b>	Public Participation and Stakeholder Consultation	X	X	X	Y
	Research and Development in the field of Sustainability Education	X	X	X	X
	Training in Sustainable Practices (innovation and research)	X	X	X	X
<b>Design</b>	Local Street Linkup	X	X	X	Y
	Compactness	X	Y	M	Y
	Accessibility	Y	Y	X	Y
	Mixed Use	X	X	X	Y
	Green Infrastructure	X	X	X	X
	Site Layout (energy efficient design)	X	X	X	Y
Y Indicates compliance. X indicates Non-Compliance		M Indicates Mixed Evidence			

The second inquiry was concerning movement overlap. Tables 1 and 2 show that the selected movements had some commonalities in relation to the circumstances that precipitated their development and the objectives they sought to achieve. There exist similarities in the conditions that led to their formation and the objectives they pursued. The garden city and neighborhood unit movements have influenced the later movements. In certain cases, new planning groups have rejected the ideals of their predecessors. Talen (2005) has also supported this rejection. Nevertheless, it can be observed that the emerging movements of neo-traditionalism and eco-urbanism have seemingly assimilated valuable lessons from previous planning cultures, thus demonstrating a conscious effort to circumvent such errors. sustainability.

On the contrary, an extensive body of research and practical applications spanning almost a century has yielded the creation of sustainable neighborhoods in the field of neighborhood planning. Due to the study's reliance on a restricted number of cases documented in existing literature, the results presented are equivocal, necessitating caution when generalizing. More study is required to answer this question. Future research should analyze more cases from each movement to see if they meet the criteria for

## Conclusions

This paper examined two aspects of neighborhoods by analyzing planning theory and guidelines. Neighborhood hierarchy and how each level of neighborhood is different in terms of population, areas, core facilities, and boundaries have been studied. While planning or researching a neighborhood, the scale of the place and its boundaries plays a vital role. It is advisable to consider the potential applicability of the neighborhood unit theory to a project or research. Despite some enhanced clarity on a neighborhood hierarchy, there are still limitations to the neighborhood notion. For an accurate portrait of the area, it is necessary to examine the individuals who live there from a variety of social, cultural, ethnic, and historical perspectives. For each neighborhood level, more information about these traits would be beneficial. Policymakers, practitioners, and academics will benefit from such a detailed study.

This study does not purport to possess representativeness across all neighborhood planning movements. The investigation focused only on major planning visions, primarily in Europe and the United States. Further research is warranted to explore further movements that have not been addressed in this discourse and to analyze the progression of neighborhood planning in various global contexts. Over the course of the last century and a half, a multitude of localized initiatives have emerged with the objective of enhancing residential circumstances and safeguarding environmental resources. Every proposed solution attempted to address the challenges specific to its historical and geographical context. Furthermore, the fact that many of these solutions continue to be employed in the present day serves as a testament to their efficacy and resilience. It is worth noting that several movements have commonalities and frequently exhibit overlapping techniques. The Neo-traditional movement and neighborhood units share a common characteristic in that they both emphasize the provision of services within proximity, hence promoting walkability and health benefits. Both neo-traditionalism and modernism have a common focus on the concept of mixed land use. Eco-urbanism places significant emphasis on the conservation of natural resources, yet it is important to note that its common elements extend beyond this aspect.

The present analysis reveals that although certain advancements have been made in the pursuit of objectives, a notable disparity persists between the discourse around community planning and the actual implementation of plans. While the most current movement, Eco-urbanism, seeks to address issues of global environmental change, historical issues like socio-economic fairness remain unresolved. Planners' over-reliance on physical and technological determinism was frequently criticized. It is imperative for planners and politicians to take care of the constraints associated with physical and technical interventions in addressing social issues. The implementation of eco-use urbanism, which prioritizes sustainability, functions as a guiding principle aimed at avoiding the misconception of physical and technological determinism. The matter of sustainability necessitates a shift in paradigm from a focus on

physical determinism to an approach grounded in sustainability-based pluralism. To be sustainable, neighborhood planning should be less prescriptive, take into consideration local context, and recognize that social, economic, environmental, and technological factors interact and should not be addressed in isolation.

To effectively address the issues posed by urbanization and the subsequent growth in population, it is imperative to have instruments that are both adaptive and integrated. In this case, Neighborhoods are given precedence as the principal platform for engagement between citizens and the city. Neighborhoods help people get a sense of the city. To achieve a higher standard of living, urban areas must be able to maintain an appropriate balance among all components of city life. To improve the quality of life in a neighborhood by providing essential services like education, health, recreation, tranquility, and security, public services are preferable. As the smallest unit of urban life, the neighborhood is the gateway to prosperity, and achieving wealth in the neighborhood results in the prosperity of the city. It is crucial to bear in mind that all these ideas are susceptible to future revisions. In future instances, the conceptual structure has the potential to be subjected to empirical scrutiny.

## References

- Abd Elrahman, A.S. & Asaad, M. (2021) 'Urban Design & urban planning: A critical analysis to the theoretical relationship gap', *Ain Shams Engineering Journal*, 12(1), pp. 1163–1173. Available at: <https://doi.org/10.1016/j.asej.2020.04.020>.
- Archer, S. & Fletchman, R. (1975) *Community health nursing: Patterns and practice*. Belmont, CA.
- Ben Arimah, J.M. & Abdallah Kassim, A.J. (2013) *UN-Habitat Global Activities Report 2013 Our Presence and Partnerships*. Nairobi:UN-Habitat.
- Barton, H., Davis, G. & Guise, R. (1996) *Sustainable Settlements: a Guide for Planners, Designers and Developers: Hugh Barton, Geoff Davis and Richard Guise University of the West of England and the Local Government Management Board(1995)*, *Cities*, 13(5), p.370. Available at: [https://doi.org/10.1016/S0264-2751\(96\)90001-3](https://doi.org/10.1016/S0264-2751(96)90001-3)
- Barton H. (2000) *The Neighborhood as ecosystem*. In *Sustainable Communities: the Potential for Eco-Neighborhoods*. Ed. by Barton H. London: Earthscan.
- Barton, H., Grant, M. & Guise, R. (2006) *Shaping Neighborhoods*. London: Routledge. Available at: <https://doi.org/10.4324/9780203986882>.
- Bijoux, D. & Pathway, B. (2012). *A Neighborhood sustainability framework for New Zealand: Beacon's research and tools*. Newzealand: Pion Press.
- Bohl, C.C. (2000a) 'New urbanism and the city: Potential applications and implications for distressed inner-city Neighborhoods', *Housing Policy Debate*, 11(4), pp. 761–801. Available at: <https://doi.org/10.1080/10511482.2000.9521387>.
- Bohl, C.C. (2000b) 'New urbanism and the city: Potential applications and implications for distressed inner-city Neighborhoods', *Housing Policy Debate*, 11(4), pp. 761–801. Available at: <https://doi.org/10.1080/10511482.2000.9521387>.
- BREEAM (2012) *BREEAM Communities*. Available at: <http://www.breeam.org/page.jsp?id=372> (Accessed: 8 January 2022).
- Briggs, X. de S. (1997) 'Moving up versus moving out: Neighborhood effects in housing mobility programs', *Housing Policy Debate*, 8(1), pp. 195–234. Available at: <https://doi.org/10.1080/10511482.1997.9521252>
- Burton, E. (1997) *The Compact City: just or just compact? Unpublished PhD thesis*. Oxford Brookes University.
- Chaskin, R.J. (1997) 'Perspectives on Neighborhood and Community: A Review of the Literature', *Social Service Review*, 71(4), pp. 521–547. Available at: <https://doi.org/10.1086/604277>.
- Chaskin, R.J. (1998) 'Neighborhood as a Unit of Planning and Action: A Heuristic Approach', *Journal of Planning Literature*, 13(1), pp. 11–30. Available at: <https://doi.org/10.1177/088541229801300102>.
- Chookah, N.A. et al. (2021) 'Sustainable Neighborhood assessment: Evaluating residential

- sustainability in Sharjah city's old Neighborhoods using the UN-habitat's sustainable Neighborhood principles', *Civil Engineering and Architecture*, 9(4), pp. 1206–1216. Available at: <https://doi.org/10.13189/cea.2021.090422>.
- Clarence Perry (2011) 'The Neighborhood Unit': from The Regional Plan of New York and its Environs 1929', in *The City Reader*. 5th ed. p. 13. London: Routledge.
- Council, U.G.B. (2006) 'LEED for Neighborhood Developments'. Washington, DC:
- Crane, M. *et al.* (2021) 'Transforming cities for sustainability: A health perspective', *Environment International*, 147(May 2020), p. 106366. Available at: <https://doi.org/10.1016/j.envint.2020.106366>.
- Dall'O', G. *et al.* (2013) 'On the integration of leadership in energy and environmental design (LEED)@ ND protocol with the energy planning and management tools in Italy: Strengths and weaknesses', *Energies*, 6(11), pp. 5990–6015. Available at: <https://doi.org/10.3390/en6115990>.
- Domhardt, K.S. (2012) 'The garden city idea in the CIAM discourse on urbanism: a path to comprehensive planning', *Planning Perspectives*, 27(2), pp. 173–197. Available at: <https://doi.org/10.1080/02665433.2012.646768>.
- Downey, L. (2006) 'Environmental Inequality in Metropolitan America in 2000', *Sociological Spectrum*, 26(1), pp. 21–41. Available at: <https://doi.org/10.1080/02732170500256716>.
- Duany, Andres. Plater-Zyberk, E. & Speck, J. (2000) *Suburban nation: the rise of sprawl and the decline of the American Dream*. 1st ed. New York: North Point Press.
- Durose, C. & Lowndes, V. (2010) 'Neighborhood Governance: Contested Rationales within a Multi-Level Setting – A Study of Manchester', *Local Government Studies*, 36(3), pp. 341–359. Available at: <https://doi.org/10.1080/03003931003730477>.
- Farr, D. (2008) *Sustainable urbanism: urban design with nature*. 1st ed. Hoboken, NJ: Wiley
- Flowerdew, R., Manley, D.J. & Sabel, C.E. (2008) 'Neighborhood effects on health: Does it matter where you draw the boundaries?', *Social Science and Medicine*, 66(6), pp. 1241–1255. Available at: <https://doi.org/10.1016/j.socscimed.2007.11.042>.
- Friedmann, J. (2010) 'Place and Place-Making in Cities: A Global Perspective', *Planning Theory & Practice*, 11(2), pp. 149–165. Available at: <https://doi.org/10.1080/14649351003759573>.
- Galster, G. (2001) 'On the Nature of Neighborhood', *Urban Studies*, 38(12), pp. 2111–2124. Available at: <https://doi.org/10.1080/00420980120087072>.
- Galster, G. *et al.* (2001) 'Wrestling Sprawl to the Ground: Defining and measuring an elusive concept', *Housing Policy Debate*, 12(4), pp. 681–717. Available at: <https://doi.org/10.1080/10511482.2001.9521426>.
- Ghaffari, K.E. & A. (2018) 'Defining Neighborhood, Analysis of Two Different Approaches: Expert-oriented Approach of Theorists and Perceptual Approach of Residents', *Armanshahr Architecture & Urban Development*, 11(24), pp. 69–80.
- Goodman, A.C. (1977) 'A Comparison of Block Group and Census Tract Data in a Hedonic Housing Price Model', *Land Economics*, 53(4), p. 483-487. Available at: <https://doi.org/10.2307/3145991>.
- Gotham, K.F. (2003) 'Toward an understanding of the spatiality of urban poverty: The urban poor as spatial actors', *International Journal of Urban and Regional Research*, 27(3), pp. 723–737. Available at: <https://doi.org/10.1111/1468-2427.00478>.
- Gotham, K.F. & Brumley, K. (2002) 'Using Space: Agency and Identity in a Public–Housing Development', *City & Community*, 1(3), pp. 267–289. Available at: <https://doi.org/10.1111/1540-6040.00023>.
- Gupta, S.K. (1974) 'Chandigarh: a study of sociological issues and urban development in India', *Architectural Design*, XLIV(06), p. 363.
- Hallman, H.W. (1986) 'Neighborhoods: Their place in urban life', *The Social Science Journal*, 23(2), pp. 233–234. Available at: [https://doi.org/10.1016/0362-3319\(86\)90048-0](https://doi.org/10.1016/0362-3319(86)90048-0).

- Hameem, S. *et al.* (2023) 'Transformations of Residential Neighborhoods of Rajshahi : The Case of Sagarpara and Padma Residential Areas in Bangladesh', *ISVS e-journal*, 10(7), pp. 58–67.
- Hamid Mohebbi, M.T. (2022) 'Influential Movements on Sustainability Concept at Neighborhood Scale (An Analysis on Theories)', *The Scientific Journal of NAZAR research center (Nrc) for Art, Architecture & Urbanism*, 18(105), pp. 103–122. Available at: <https://doi.org/10.22034/BAGH.2021.290519.4915>.
- Hanibuchi, T. *et al.* (2012) 'Does walkable mean sociable? Neighborhood determinants of social capital among older adults in Japan', *Health & Place*, 18(2), pp. 229–239. Available at: <https://doi.org/10.1016/j.healthplace.2011.09.015>.
- Harris, R. (2016) 'Michael A. Pagano (ed.) 2015: Return of the Neighborhood as an Urban Strategy . Urbana: University of Illinois Press, *International Journal of Urban and Regional Research*, 40(4), pp. 889–890. Available at: <https://doi.org/10.1111/1468-2427.12396>.
- Hashemi, Alireza, A., Taghvaei, A.A. & Reza, M. (2018) 'Prosperous Neighborhood : New Significance or Old Concept to Achieve Livable Community ?', *Specialty Journal of Architecture and Construction*, 4(4), pp. 20–39.
- Haynes, R., Daras, K., Reading, R. & Jones, A. (2007) 'Modifiable Neighborhood units, zone design and residents' perceptions', *Health & Place*, 13(4), pp. 812–825. Available at: <https://doi.org/10.1016/j.health-place.2007.01.002>.
- He, S. and Wu, F. (2007) *China's Emerging Cities: The Making of New Urbanism*. 1st Ed. New York: Routledge. Available at: <https://doi.org/10.4324/9780203937808>.
- Hemani, S. & Das, A.K. (2016) 'Humanising urban development in India: call for a more comprehensive approach to social sustainability in the urban policy and design context', *International Journal of Urban Sustainable Development*, 8(2), pp. 144–173. Available at: <https://doi.org/10.1080/19463138.2015.1074580>.
- Hipp, J.R., Faris, R.W. & Boessen, A. (2012) 'Measuring "Neighborhood": Constructing network Neighborhoods', *Social Networks*, 34(1), pp. 128–140. Available at: <https://doi.org/10.1016/j.socnet.2011.05.002>.
- Hirt, S. (2007) 'The Compact versus the Dispersed City: History of Planning Ideas on Sofia's Urban Form', *Journal of Planning History*, 6(2), pp. 138–165. Available at: <https://doi.org/10.1177/1538513206301327>.
- Howard W. Hallman (1984) *NEIGHBORHOODS: THEIR PLACE IN URBAN LIFE*. 1st Ed. Beverly Hills: Sage Publications.
- Kallus, R. & Law-Yone, H. (2000) 'What is a Neighborhood? The Structure and Function of an Idea', *Environment and Planning B: Planning and Design*, 27(6), pp. 815–826. Available at: <https://doi.org/10.1068/b2636>.
- Keller, S. (1968) *The Urban Neighborhood: a sociological perspective*. New York: Random House. Available at: <https://doi.org/10.1093/sf/47.3.367>.
- Khatibi, M., Khaidzir, K.A.M. & Syed Mahdzar, S.S. (2023) 'Measuring the sustainability of Neighborhoods: A systematic literature review', *iScience*, 26(2), p. 105951. Available at: <https://doi.org/10.1016/j.isci.2023.105951>.
- Lamont, M. & Molnár, V. (2002) 'The Study of Boundaries in the Social Sciences', *Annual Review of Sociology*, 28(1), pp. 167–195. Available at: <https://doi.org/10.1146/annurev.soc.28.110601.141107>.
- Lee, B.A., Oropesa, R.S. & Kanan, J.W. (1994) 'Neighborhood Context and Residential Mobility', *Demography*, 31(2), pp. 249–270. Available at: <https://doi.org/10.2307/2061885>.
- Lloyd Lawhon, L. (2009) 'The Neighborhood Unit: Physical Design or Physical Determinism?', *Journal of Planning History*, 8(2), pp. 111–132. Available at: <https://doi.org/10.1177/1538513208327072>.
- Marans Robert W., R.W. (1975) "Toward an Understanding of Community Satisfaction." In A. H. Hawley & V. P. Rock (Eds.), *Metropolitan America in contemporary perspective* (pp. 299–352). New York: John Wiley and Sons.

- Martin, D.G. (2003) 'Enacting Neighborhood 1', *Urban Geography*, 24(5), pp. 361–385. Available at: <https://doi.org/10.2747/0272-3638.24.5.361>.
- Milbrath, G.R. & Deguzman, P.B. (2015) 'Neighborhood: A Conceptual Analysis', *Public Health Nursing*, 32(4), pp. 349–358. Available at: <https://doi.org/10.1111/phn.12197>.
- Minnery, J. *et al.* (2009) 'Bounding Neighborhoods: How Do Residents Do It?', *Planning Practice & Research*, 24(4), pp. 471–493. Available at: <https://doi.org/10.1080/02697450903327170>.
- Mumford, L. (1954) 'The Neighborhood and the Neighborhood Unit', *Town Planning Review*, 24(4), pp. 256–270. Available at: <https://doi.org/10.3828/tpr.24.4.d4r60h470713003w>.
- Packalén, S. (2010) 'Culture and sustainability', *Corporate Social Responsibility and Environmental Management*, 17(2), pp. 118–121. Available at: <https://doi.org/10.1002/csr.236>.
- Park, Y. & Rogers, G.O. (2015) 'Neighborhood Planning Theory, Guidelines, and Research', *Journal of Planning Literature*, 30(1), pp. 18–36. Available at: <https://doi.org/10.1177/0885412214549422>.
- Rohe, W.M. (2009) 'From Local to Global: One Hundred Years of Neighborhood Planning', *Journal of the American Planning Association*, 75(2), pp. 209–230. Available at: <https://doi.org/10.1080/01944360902751077>.
- Sampson, R.J. & Raudenbush, S.W. (2004) 'Seeing Disorder: Neighborhood Stigma and the Social Construction of "Broken Windows"', *Social Psychology Quarterly*, 67(4), pp. 319–342. Available at: <https://doi.org/10.1177/019027250406700401>.
- Serag El Din, H. *et al.* (2013) 'Principles of urban quality of life for a Neighborhood', *HBRC Journal*, 9(1), pp. 86–92. Available at: <https://doi.org/10.1016/j.hbrj.2013.02.007>.
- Sharifi, A. (2016a) 'From Garden City to Eco-urbanism: The quest for sustainable Neighborhood development', *Sustainable Cities and Society*, 20, pp. 1–16. Available at: <https://doi.org/10.1016/j.scs.2015.09.002>.
- Sharifi, A. (2016b) 'From Garden City to Eco-urbanism: The quest for sustainable Neighborhood development', *Sustainable Cities and Society*, 20, pp. 1–16. Available at: <https://doi.org/10.1016/j.scs.2015.09.002>.
- Smith, M.E. (2010) 'The archaeological study of Neighborhoods and districts in ancient cities', *Journal of Anthropological Archaeology*, 29(2), pp. 137–154. Available at: <https://doi.org/10.1016/j.jaa.2010.01.001>.
- Stedman, R.C. (2002) 'Toward a Social Psychology of Place: Predicting Behavior from Place-Based Cognitions, Attitude, and Identity', *Environment and Behavior*, 34(5), pp. 561–581. Available at: <https://doi.org/10.1177/0013916502034005001>.
- Suttles, G.D. (1972) *The social construction of communities*. Chicago: University of Chicago Press.
- Ward, S. (2005) *The Garden City*. 1st Ed. London: Routledge. Available at: <https://doi.org/10.4324/9780203973615>.
- Weiland, U. (2006) 'Sustainability Indicators and Urban Development', *In Global Change, Urbanization and Health*, pp. 241–250. Beijing: China Meteorological Press
- Weiss, L. *et al.* (2007) 'Defining Neighborhood Boundaries for Urban Health Research', *American Journal of Preventive Medicine*, 32(6), pp. 154–S159. Available at: <https://doi.org/10.1016/j.amepre.2007.02.034>.
- Wijesundara, J., Weerasinghe, U.G.D. & Perera, L.S.R. (2021) 'Inhabitants' Satisfaction in Neighborhood Sustainability: Insights from Colombo', *ISVS e-journal*, 8(1), pp. 64–76.