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ANGLO-AMERICAN GEOSPATIAL DIALOGUE ON THE GARDEN CITY CONCEPT AND ITS IMPACT ON COMMUNITY AND REGIONAL PLANNING

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Abstract: The Garden City was introduced in 1898 by Ebenezer Howard as a model for a healthy industrial city grounded in philanthropic speculation. This theoretical model sought to create a socially and spatially balanced urban environment, addressing the socio-economic, sanitary, and spatial challenges of capitalist development. Although utopian in vision, Howard framed the proposal as a moderate reform, which led to its widespread adoption and lasting influence on urban planning. This article analyzes how the concept's socio-spatial framework addressed recurring urban problems and informed planning practices. Beyond its frequent interpretation as an architectural or planning model, the concept can also be understood as a geographical discourse for analyzing urban–rural relations, land-use organization, and regional spatial planning. In the United States of America (USA), where speculative construction and uncontrolled suburban sprawl were persistent issues, the Garden City concept found fertile ground throughout the twentieth century. From a geographically informed perspective, American adaptations of the concept under varying socio-economic, political, and territorial conditions reshaped patterns of suburbanization, regional development, and environmental planning. The USA experience played a significant role in forming spatial models such as garden suburbs, planned communities, and later approaches associated with New Urbanism. These developments reveal both the adaptability of the Garden City concept and its limitations when detached from broader socio-spatial objectives. This article situates the Garden City within geospatial debates in urban and human geography, underscoring its continued relevance for contemporary discussions on spatial planning, environmental sustainability, and the organization of urban regions.

Keywords: Garden City; socio-spatial relations; town and regional planning; suburban development in the USA; New Urbanism

1. Introduction

More than a century ago, Howard (1898) presented a plan for creating a healthy industrial city. It was conceived as a comprehensive socio-spatial model of a settlement built outside

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the area of industrial metropolises and designed to provide its inhabitants with both economic and social well-being. Throughout the twentieth century, the idea became widely known as the Garden City concept.

The Garden City emerged in urban Great Britain amid rapid industrial and late nineteenth-century development. Industrialization, while advancing civilization, exposed severe social issues—poor living conditions in working-class districts, deadly epidemics, and rising crime rates—threatening political and economic stability. At the time of Howard's proposal, state initiatives to improve housing, healthcare, and sanitation had yet to yield significant results. This context created fertile ground for Ebenezer Howard's vision: a theoretical solution to pressing social challenges through the Garden City model (Ćorović, 2008, 2009; Hall, 2002; Hall & Ward, 2014).

The term Garden City has been applied to diverse urban settlements in form and essence, ranging from industrial villages, model towns, and suburbs to new towns and satellite cities. Despite its prominence in urban planning discourse, the Garden City concept has frequently been reduced to its physical and morphological features, while its social, economic, and territorial dimensions—integral to the original Howard's vision—have remained underexplored. This persistent misinterpretation is evident since the inception of the Garden City idea. It has been suggested that such misinterpretations stem from remarkably broad applicability of the concept and the fragmented dissemination of its principles (Buder, 1969; Hall, 2002). In the context of today's intertwined environmental and social crises, revisiting the Garden City framework is not merely relevant but of pressing geographical relevance. Its holistic approach to socio-spatial relations offers a critical lens for reimagining urban futures that integrate environmental issues with ecological sustainability, social equity, and economic resilience. Advancing models that move beyond spatial design, position the Garden City as a significant paradigm for contemporary geographical-spatial transformation (Khavarian-Garmsir et al., 2023; Spórna et al., 2025; van der Gaast et al., 2020).

Recent theoretical developments in geography point to the importance of rethinking the Garden City concept. Videlicet, a theoretical and conceptual shift has occurred from the notion of space to that of spatiality. The fundamental distinction between these concepts, within the field of geography, is defined by the difference between relative space to relational spatiality. Spatiality refers to a network of spatial and social characteristics whose interrelations define the quality of space; in this sense, it serves as the foundation for social life and collective organization (Ćorović et al., 2024; Kobayashi, 2017). The current renewed geographical interest in relational space and spatiality establishes a relevant approach for reinterpreting the concept of the Garden City, given that the organization of socio-spatial relations is immanent to the concept. The Garden City concept is conceived as a balance between social relations, economic activity, and spatial form within a consistent territorial system.

Furthermore, within the framework of geographical inquiry, the Garden City can be understood as an early attempt to conceptualize socio-spatial relations at multiple levels, such as: neighborhood, settlement, city and its surroundings, up to the regional network of cities and landscapes. The questions that the Garden City concept raises include land use regulation, green belts, connectivity and collective governance, and subsequently position it as a harbinger of approaches in regional and spatial planning. Consequently, this study reexamines the Garden City concept within its historical and transatlantic context, focusing on its geographical implications and spatial transformations. Challenging the prevailing view of a unilateral British influence on urban practices in the USA the study points to a dynamic

Anglo-American exchange in re-shaping the theory and its application. In the USA, where speculative construction and uncontrolled suburban sprawl were persistent issues, the Garden City offered a compelling alternative. Addressed are the key USA developments—such as Forest Hills, the New Deal, Garden Metropolis, New Urbanism, and contemporary resilient urbanism. The interplay between Garden City theory and its American adaptations highlights enduring urban and social challenges and offers insights for future conceptual developments. The relevance of Garden City principles and their implementation within the USA urbanism continue to shape integrated, environmentally conscious, and community-oriented urban models, contributing to sustainable urban systems.

2. The Garden City concept: Howard's idea for the New Town

Ebenezer Howard was born in London, but in his twenties, he moved to the USA and lived in Chicago, Illinois. There he witnessed the reconstruction of the city following the Great Fire of 1871, the intensive rebuilding of its central districts, and the formation of a peripheral green belt consisting of parks. Howard's American experience is widely regarded as a formative influence on his intellectual and spiritual development, which was particularly significant for him and his work (Knight, 2023). However, with the implementation of the Garden City concept in the twentieth century, this relationship evolved into a two-way Anglo-American exchange, the effects of which remain evident to this day. Howard (1898, 1902) published *To-Morrow: A Peaceful Path to Real Reform* and its slightly revised second edition, *Garden Cities of To-Morrow*, both of which were well received. Likewise, the public recognized activities of the Garden City Association, founded in 1899, as a significant reformist movement in housing policy and urban planning (Beevers, 1988; Ćorović, 2009; Hall & Ward, 2014).

One of the earliest representations of the Garden City concept is Howard's *Three Magnets* diagram, which illustrates a third type of human settlement, neither town nor country, but rather a synthesis of both: the Town-Country. This new settlement type combines the advantages of both urban and rural environments, such as: the beauty of nature, proximity to fields and parks, affordable rents, low rates and prices, pure air and water, absence of smoke and slums (Howard, 1902). At the same time, the project advocated for ample social opportunities, employment, prospects for enterprise, circulation of capital, high wages, absence of exploitative labor, communal infrastructure, bright homes and gardens, freedom, and cooperation (Howard, 1902) (Figure 1A). The establishment of such a settlement on agricultural land is proposed as the solution to the prevailing problems of urban environments. In spatial terms, Howard envisioned the Garden City as comprising an urban core surrounded by its own agricultural land, encompassing approximately 2,400 ha and designed for 32,000 inhabitants (Figure 1B). Surrounding the urban core—among gardens, orchards, pastures, forests, and meadows—Howard proposed the construction of specialized farms, secondary schools, children's holiday homes, convalescent homes, farms employing people with epilepsy, and small-scale craft workshops (Howard, 1902). At the heart of the urban area, Howard planned an open green public space, a garden, encircled by public buildings. The town center is encompassed by a public park and recreational zone. Residential quarters, interspersed with schools and churches, were immersed in urban greenery. Howard's urban scheme, housing design and physical layout of the city emphasized the freedom of residents to choose their preferred environment, provided that it complied with urban and sanitary standards and conformed to the adopted regulatory plan of the settlement. At the periphery, he planned an industrial zone comprising factories, warehouses,

and markets, interconnected by railways and linked to the national transportation network. This connectivity was considered one of the fundamental prerequisites for the existence and sustainability of the Garden City. Moreover, efficient transport links with other settlements were envisioned as the basis for the formation of a new urban expression, a higher-order of development of the Garden City in both quality and quantity: the creation of the Social City, with a total population of 250,000 inhabitants, consisting of six Garden Cities arranged around a Central City housing 58,000 residents (Howard, 1965) (Figure 1C).

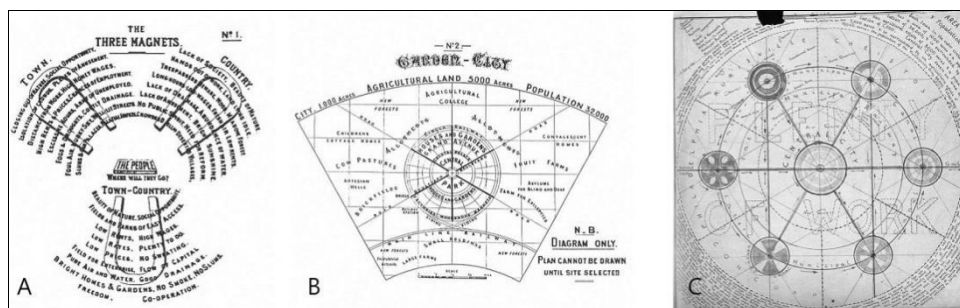


Figure 1. a) The Three Magnets, a diagram; b) Garden City, a diagram; c) E. Howard, Social City, concept, hand drawing.

Note. Panels A and B adapted from *Garden Cities of Tomorrow* by E. Howard, 1902, Swan Sonnenschein & Co., Ltd. (https://www.gutenberg.org/files/46134/46134-h/46134-h.htm#Page_22). In the public domain. Panels A, B, and C adapted from *Letchworth, The First Garden City*, by M. Miller, 2002, Phillimore & Co. Ltd. Copyright 2002 by Phillimore & Co. Ltd.

Howard's Garden City plan envisions the creation of a physical environment designed to implement social reform that reconciles the principles of individualism and socialism. It aims to enable the full realization of the residents' personal capacities as members of a collective, while also ensuring the well-being of the entire community. The establishment of such a settlement on agricultural land depends on the support of those who would choose to work in free cooperatives and live in a community without social segregation, individuals who are personally invested in the success of the Garden City project. Economically, it represents a form of philanthropic speculation: the land for construction is initially purchased at a much lower price than overpriced urban lots, but its value increases as the city develops. The economic logic assumes that the land remains in collective ownership, and that the income generated by the rise in land value, after the repayment of principal and interest, is directed by the community association to the city's Board of Management or its Central Council. The Garden City's revenues come from a single tax, consisting of rent payments for leased land, property tax, and taxes paid by workers and business owners within the Garden City, the so-called "Rate-Rent". The community association renounces the profit that private landowners would otherwise fully appropriate. Nevertheless, after a certain period, a portion of the income is distributed to shareholders as profit, while another portion always goes into the community budget, for the construction of roads, schools, hospitals, and parks, and generally for improving the quality of life, which in turn raises the value of the land itself (Buder, 1969; Ćorović, 2025; Howard, 1965). Considering the scope of this study, the economical aspect of Howard's Concept is of exceptional importance in terms of regulating social and spatial components of the Plan, and often very difficult to achieve.

3. The implementation of the idea

3.1. *Letchworth, the world's first Garden City*

Howard's Garden City concept gained broad support, including British industrialists, who helped organize two Garden City conferences, in Bournville in 1901 and in Port Sunlight in 1903. The outcome of these conferences was establishing the conditions for constructing a Garden City and securing a suitable site, followed by the founding of the Garden City Pioneer Company and the First Garden City Ltd.

The site chosen for the first implementation of the concept was located about 50 km northeast of London. The area was well irrigated, rich in greenery, and railway passed nearby. Most of the requirements prescribed by the Garden City Pioneer Company for the creation of a Garden City were met there. The site covered an area between 1,600 and 2,400 ha, had access to a water supply, allowed for the installation of an economical sewage system and ensured a full water network, while being close to a major business center. The ceremonial opening of the site on the 9th of October 1903 marked the beginning of a long process of forming the world's first Garden City. In 1904, the shareholders and residents chose the name of one of the estate's hamlets, Letchworth, as the name of the city. The city reached its planned population capacity only after World War II, with the help of government subsidies as part of Britain's New Towns development initiative (Hall & Ward, 2014; Miller, 2002).

Following a closed competition involving three teams of experts, the winning proposal was authored by Raymond Unwin and Barry Parker. Their design achieved the most effective integration with the site's existing features and natural landscape, aligning primary and secondary axes with the existing natural and infrastructural elements, including communication routes and railway line (Figure 2A). Likely influenced by German practices in urban zoning, the plan featured clearly defined functional zones. The industrial zone was planned in the northeastern part of the city, determined largely by the prevailing wind direction. The plan also delineated residential quarters, a commercial area, the city center, and spaces for public buildings, such as schools, churches, hotels, administrative offices, and open green areas and parks. Like Howard, Unwin and Parker also envisioned a green agricultural belt surrounding Letchworth, designed to limit urban expansion and function together with the city as a unified whole. The urban composition of the settlement featured a radial street system combining both formal and organic elements. The construction line in the plan of Letchworth was independent from the regulation line. There are no solid walls between plots. All residential buildings appeared as if situated in a large, shared park, oriented toward semi-public communal spaces, the so-called closes or cul-de-sacs (Buder; 1990; Ćorović, 2008; Kostof, 2001).

Despite the conceptual clarity of Howard's model, its implementation in Letchworth required significant compromises. For example, Howard envisioned land tenure arrangements that would prevent the concentration of ownership and speculative practices, proposing short-term leases of five years to preserve collective control over land value. However, in order to attract investment and ensure financial viability, longer lease terms were introduced under the influence of key institutional actors. This adjustment marked a critical shift in the socio-spatial logic of the Garden City, demonstrating the tension between idealized spatial models and the economic realities of urban development. The departure of Unwin from the project further illustrates how ideological and financial considerations shaped the spatial outcomes of early Garden City experiments (Ćorović, 2008; Miller, 2015).

Howard then accepted the lateral position in the Movement. His next project was the formation of Welwyn Garden City, one of the three realizations of the original theoretical model. The town was conceived after the First World War by Howard and his associates as the first of the planned satellite towns near London (Guerra et al., 2023). From the very beginning, Howard emphasized the moderation of the reforms of his concept (Beevers, 1988). It is believed that, to gain support, he consciously avoided those characteristics of the Garden City ideal, such as, for example, common ownership of land. Therefore, Howard concealed the premises of his concept, which could indicate the idea's revolutionary nature (Tafari, 1976).

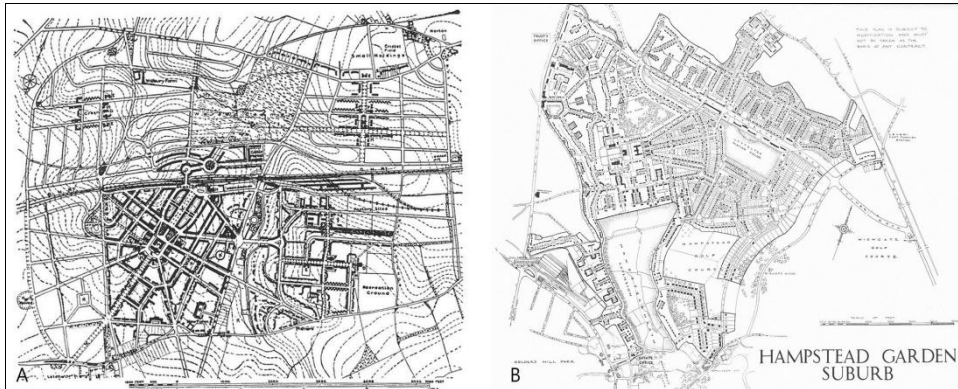


Figure 2. Panel A: Plan for Letchworth Garden City, Hertfordshire, GB, 1904, Raymond Unwin & Barry Parker.
Panel B: Plan for Hampstead Garden Suburb, London, GB, 1906, Raymond Unwin & Barry Parker.

Note. a) Adapted from *Letchworth, The First Garden City* (p. 44), by M. Miller, 2002, Phillimore & Co. Ltd. Copyright 2002 by Phillimore & Co. Ltd., b) Adapted from *The Search for Environment – The Garden City: Before and After* (p. 237), by W. L. Creese, 1966, Yale University Press. Copyright 1966 by Yale University Press.

3.2. The idea of Garden City comes to the world

If the influence of the Garden City movement were to be assessed through the settlements built in greater or lesser accordance with the original concept, it would become evident that the Garden City directly affected the lives of tens of millions of people worldwide (Batchelor, 1969). The first official introduction of this innovative concept to the international professional community occurred at the International Town Planning Congress held in 1910 and organized by the Royal Institute of British Architects. The congress gathered approximately 1,300 participants. Two principal schools of thought were particularly prominent: that of Joseph Stübben, who advocated technical solutions for large urban centers, and that of Daniel Hudson Burnham, the leading proponent of the City Beautiful Movement. Despite their differing theoretical standpoints, the congress reached a consensus that urban planners should devote attention to health, beauty, functionality, order, and economy in all aspects of the urban environment. The participants of the congress, engaged in what was then an emerging professional field of urban planning, primarily focused their presentations on the development of large cities and their central areas. Raymond Unwin, representing the British delegation, delivered a presentation on Garden Cities and organized visits to Letchworth and Hampstead Garden Suburb (Buder, 1990).

The Garden City movement exerted a significant influence on British urban planning legislation. The Housing, Town Planning, etc., Act of 1909 introduced the term “Town Planning” for the first time. Subsequently, the Housing, Town Planning, etc., Act of 1919 required local authorities to assess the housing needs within their jurisdictions. Raymond Unwin, who participated in the state commissions responsible for drafting these legislative acts, played an important role in their formulation. Nonetheless, the legislation exhibited certain deficiencies, particularly its failure to consider the situation at the national scale and to ensure coherent, coordinated action. Then again, the Act was directly shaped by the planning standards achieved in Letchworth and Hampstead, notably low housing density and distinctive layouts. Therefore, while the formal characteristics of the Garden City plan were relatively easily translated into practice, the essential principles underlying the Garden City concept were largely neglected (Burke, 1971; Kostof, 1990).

The planning and construction of the Hampstead Garden Suburb in London also had an impact on planning theory and practice in the United Kingdom. The settlement was conceived as a classless suburb, or a suburb for all social classes, by Henrietta Barnett. She was a social reformer, philanthropist, and writer, who spent several decades of her life in East London’s Whitechapel district, engaged in charitable work and the improvement of local social conditions together with her husband, Reverend Samuel Barnett. During a five-year campaign, Mrs. Barnett succeeded in securing 32 ha of land, which came under the ownership of the London County Council. Additional 200 ha were later acquired from Eton College. On this site, the Hampstead Garden Suburb was established according to the 1906 plan designed by Unwin and Parker (Figure 2B). The basis for democratizing design of the Suburb could be derived from Unwin’s socialist values streaming from the socialist utopian thought of John Ruskin, William Morris, and Edward Carpenter (Miller, 2015). In terms of its social program, Hampstead may have been even closer to Howard’s original Garden City concept than Letchworth. Among the key principles Mrs. Barnett set for the suburb were the following: that people of all social strata, regardless of income, should be able to reside there, supported by affordable rental prices—thus ensuring a classless and non-discriminatory community; that all green spaces should be public and freely accessible; that housing density should average 20 dwellings per ha; that streets should be 13.2 m wide with 16.5 m between buildings on opposite sides; and that each house should enjoy an unobstructed view of the surrounding landscape. However, the suburb remained entirely dependent on London. It lacked industrial facilities and offered no employment opportunities for its residents. Concerning growth limitations, it proved difficult to establish a green belt only 8 km from central London. Consequently, Unwin and Parker proposed the construction of a masonry wall with a gate as a physical boundary to the settlement. Most notably, the design of Hampstead as envisioned by Unwin could only be realized through changes in the existing planning legislation. Therefore, in 1906, a special act, the Hampstead Garden Suburb Act, was passed in Parliament. This act later served as the foundation for housing and town planning regulations throughout Britain (Creese, 1966; Hall, 2002; Panerai, 2004).

In Europe, during the years preceding the First World War, the Garden City concept was perceived as a remedy for the overcrowding of large industrial cities and as an alternative to speculative urban development. This fact fully resonates with the contemporary moment, and in the initial phase of the garden city’s implementation it was recognized as being universal in nature. Howard’s book was, soon after being published, translated into several

languages: French (1903), German (1907), and Russian (1911), and early visitors to Letchworth came from France, Germany, and the USA (Batchelor, 1969).

As it turned out, Howard's theoretical concept demonstrated a remarkable degree of applicability and adaptability across diverse social, historical, economic, political, and ideological contexts, with a potential for addressing the urgent issues of society and performing the powerful tool of biopolitics and social engineering. Telling is the construction of the first German Garden City, Margarethenhöhe. The history of this place inevitably reflected the history of Nazi Germany (Bolz, 2011), making the housing legacy of Krupp's company a critical case in the wide scope of interpretations and utilization of the concept. Margarethenhöhe was initiated in 1906 by the industrialist and arms-manufacturing Krupp family. Margarethe Krupp established the Margarethe Krupp Foundation and provided both land and financial resources for its creation. By the mid-nineteenth century, the Krupp family had already built fourteen workers' colonies in the vicinity of Essen, and the construction of Margarethenhöhe continued from 1909 to 1938. The planning and design of the settlement were entrusted to architect Georg Metzendorf, who served in this position in Essen for twenty-five years until his death. The settlement was intended primarily for employees of the Krupp company and municipal workers of Essen. It was conceived both as a gift to the citizens of Essen and as a laboratory for testing the conditions of high-quality urban life. Margarethenhöhe featured modern housing with heating and bathrooms, comprehensive public utility infrastructure, landscaped green and public spaces within and around the city, and all public institutions necessary for a modern community. However, throughout the city's history, the strict oversight of employees was effectively mitigated by the social benefits, and the goals of the growing war-machine were coupled with patronizing care for the workers. While providing an influential role model, Margarethenhöhe also brought an unprecedented controversy to the history of the implementation of the Garden City concept.

The enduring appeal of the Garden City is intriguing in its capacity to adapt to differing social, economic, cultural, and environmental settings, a flexibility that has ensured its wide-ranging effect (Miller, 2002). Based on the layout of Howard's Garden City, numerous plans for settlements and cities were created in New Zealand, Australia, Canada, Argentina, Mexico, India, South Africa, Israel, Japan, Egypt, Scandinavia, Finland, Belgium, Italy, Spain, Austria, Greece, Hungary, the Czech Republic, Imperial Russia, as well as the Soviet Union (Ćorović, 2008). Across different geographical regions and under varying socio-economic systems and time periods, even within the most recent urban planning paradigms promoting sustainable development, the foundational principles of the Garden City concept can be observed, recognizing its durable values and learning from its shortcomings.

4. Garden City: American development

4.1. Garden City in romantic surroundings

The American reinterpretation of the Garden City concept can be understood through the prism of geographical discourse, as a process of spatial translation. Defined by suburbanization, regional mobility, land use regulation, and environmental conditions, it provides a clearer picture of how planning ideas interact with broader geographic forces. It is impossible to enumerate all the aspects that illuminate the complex process marking the multifaceted relationship between the British Garden City movement and American urban planning

professionals. In the USA, the Garden City was regarded as a concept that corresponded perfectly with the broader vision of the region that preoccupied American planners.

A Garden City for America, as the press referred to Forest Hills Gardens, was developed starting in 1909 on Long Island, near New York City, in the state of New York (Figure 3A). The project emerged after Ebenezer Howard founded the Garden Cities Association of America in 1906 (Vernet & Coste, 2017). This settlement represents the first and the most significant application of the Garden City concept in the USA prior to the First World War. Sponsored by the non-profit Russell Sage Foundation as a middle-class residential community, it was intended to demonstrate a prospect to build housing districts that were not the product of chaotic speculative development. The author of the settlement's master plan was Frederick Law Olmsted Jr. He was the founder of the first academic program in Landscape Architecture established in 1900, followed by the first program in Town Planning, at Harvard University (Creese, 1966; Hall, 2002; Miller, 2002; Newton, 1971). Olmsted's father, landscape architect Olmstead Sr. and architect Calvert Vaux developed the plan for Riverside (1868–1869), a Chicago suburb that harmoniously integrates the spatial qualities of town and countryside. Although Howard denied any influence from Riverside, its design undeniably exemplifies American sensibility for urban planning aligned with the Garden City principles.

The American settlement Forest Hills Gardens, covering an area of approximately 57 ha, embodied the spirit of both Hampstead Garden Suburb near London and Margarethenhöhe near Essen (Coleman, 1994). Architect Grosvenor Atterbury, known for his work on housing reform, collaborated closely with Olmsted Jr. in devising a carefully conceived plan for every part of the development, supported by a set of detailed and diverse drawings. As a result, Forest Hills Gardens remains one of the most distinguished examples of experimental suburban planning. The Russell Sage Foundation, together with its vice president Robert DeForest, aimed to create a community demonstrating that comprehensive planning and high-quality design could yield both practical and profitable outcomes in residential construction. The settlement was, to a greater extent, an economic rather than a social experiment. The Foundation primarily targeted white middle- and upper-middle-class buyers and tenants. Regarding the planning and design process, as Susan L. Klaus (2002) notes, Olmsted Jr. believed that the high spatial and aesthetic quality was achieved thanks to a unified guiding vision for the project, an integrated master plan, consistent architectural and landscape expression, collaboration with well-educated consultants, and the presence of a single individual responsible for coordinating the entire construction process. Nevertheless, alongside these strictly professional characteristics, the quality of the settlement became subject to critical reassessment over time.

The American planner Clarence Perry, who lived in Forest Hills Gardens for decades, claimed that the settlement's quality and the well-designed environment that supported community life could largely be attributed to its relatively small size, the presence of organized open spaces, institutions, local commercial amenities, and an internal communication system. However, Perry identified shortcomings such as the lack of spaces for active recreation, insufficient commercial facilities, and an unsuitable location for the community center complex within the neighborhood (Klaus, 2002). Another unusual feature of the settlement was the use of prefabricated facade elements with integrated electrical installations, which recreated historic Tudor style. This approach undoubtedly reduced costs and simplified the building process. Yet, it may also have represented an anticipation of Hollywood-style kitsch as argued by Hall (2002). Likewise, it could have reflected the distinct architectural expression cultivated by the prominent New York architect Atterbury, which may indicate the artificiality of the entire

concept, the Arcadian distance from real life and its problems. Nevertheless, nearly a century after its establishment, the residents of Forest Hills Gardens maintain that its remarkable preservation of the original character, which distinguishes it from comparable developments, serves as evidence of its lasting spatial quality that continues to evolve (Klaus, 2002).

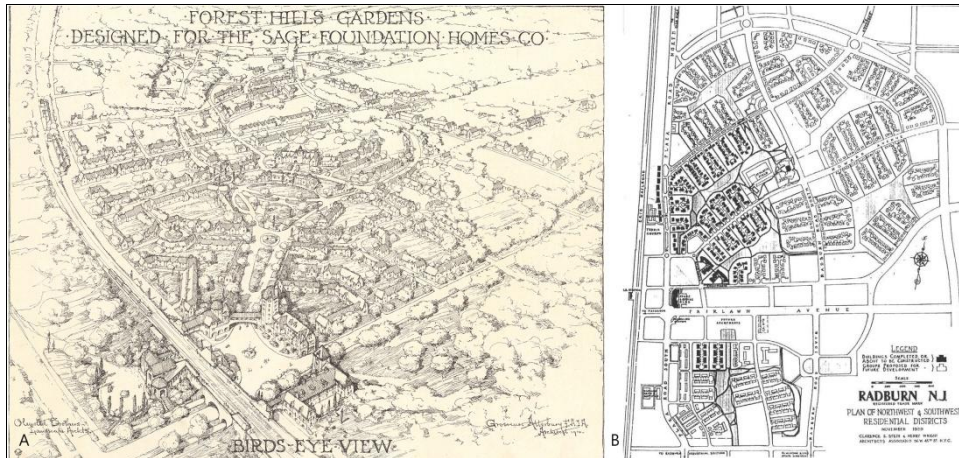


Figure 3. Panel A: Plan for Forest Hills Gardens, Long Island, New York, USA, birds eye view, Olmsted Brothers Landscape Architects & Grosvenor Atterbury, 1910. Panel B: Plan for Radburn, New Jersey, USA, Plan of Northwest & Southwest Residential Districts, Clarence Stein & Henry Wright, 1929.

Note. a) Courtesy of the United States Department of the Interior, National Park Service, Frederick Law Olmsted National Historic Site

(https://www.flickr.com/photos/olmsted_archives/33591603870/in/album-72157663222779356); b)

Adapted from *Visionaries & Planners: The Garden City Movement and the Modern Community* (Illustration 15), by S. Buder, 1990, Oxford University Press. Copyright 1990 by Oxford University Press.

Drawing on his personal experience as a resident of Forest Hills Gardens, Perry was convinced that a well-planned and well-designed community could significantly strengthen the public spirit of its inhabitants. In his publication from 1929 *The Neighbourhood Unit: A Scheme of Arrangement for the Family-Life Community*, written for the Regional Planning Association regarding the drafting of the Master Plan of New York, Perry proposed the forming of neighborhood units organized around a local primary school located at the center of each community. According to Perry (2020), the size and population of such a unit should be determined by the number of families served by the school, ranging from 750 to 1,500 families, within an area of 60 to 120 ha. Additionally, the unit would be enclosed by major traffic arteries, thereby eliminating the need for through-traffic within residential areas, while maintaining a hierarchically organized internal street network with low traffic intensity. Approximately 40% of the total area was to be allocated to streets and open spaces, while commercial facilities were to be situated along the periphery, adjacent to the arterial and major traffic roads. It has been argued that Ebenezer Howard's Garden City concept partially anticipated this program, since in Howard's own plan, the school was positioned at the center of a residential zone with approximately 5,000 inhabitants, located no more than 400 m from the remotest dwelling (Hall, 2002; Newton, 1971).

4.2. Garden City and the New Deal policy

In examining Anglo-American relations concerning the idea and implementation of the Garden City, one of the most illustrative features is the continuous and reciprocal exchange of experience and knowledge between planners and theoreticians from both countries. Barry Parker drew upon American experience when designing the traffic network for the plan of the satellite town of Wythenshawe, near Manchester. For Raymond Unwin, American practices proved valuable in understanding the construction of tall buildings, achieved population densities, the nature of communications and transport in large urban centers, and the influence of all these factors on metropolitan development. The progress of urban planning in the USA between the two World Wars in turn influenced the British Garden City movement, reviving its experimental spirit (Ćorović, 2008).

During his stay in the USA in 1928, Unwin participated in the planning project for Radburn, New Jersey. Principal authors were Clarence Stein and Henry Wright, both of whom had earlier visited Unwin and Howard in 1924. Radburn was particularly significant because it was the first settlement to seriously address the relationship between the suburb and the increasing use of the automobile. The problem was resolved through the separation of pedestrian and vehicular traffic, a clear segregation of streets according to traffic intensity, and the creation of superblocks, each consisting of clusters of individual housing units arranged around *cul-de-sacs* (Figure 3B). At the center of each superblock is a communal park, surrounded by a main road that provides vehicular access to every house. Pedestrian pathways were designed around *closes* and served as connections between superblocks. Where necessary, bridges and underpasses were constructed to integrate the system into a whole. Every part of the settlement could be reached without pedestrian and automobile routes intersecting on the same level. The houses were oriented so that living and resting areas faced gardens and green spaces. Service areas faced the street. Collectively, these elements formed an exceptionally well-conceived system in which the planners successfully reduced the surface area occupied by roads and reinvested the saved resources into communal green areas, thereby enhancing the quality of life without increasing the cost of individual housing units.

All public spaces in Radburn were managed by The Radburn Association. The organization was responsible for determining the amount of taxes and various fees, collecting and allocating these funds for the maintenance of public and green areas within the settlement. However, as Peter Hall observes, Radburn did not develop into a community with a socially diverse population. Records indicate that by 1934, all the houses sold were owned by individuals belonging to at least the middle managerial ranks of their respective companies. As was the case with several other settlements originally envisioned as mixed-class communities, such as Hampstead Garden Suburb, they ultimately became suburban enclaves characterized by high property prices and a homogeneous social structure. Strictly speaking, Radburn cannot be regarded as a Garden City in the true sense of the term. Rather, it represents a garden suburb, which, like many similar American examples, was eventually absorbed into the expanding urban periphery (Hall, 2002; Newton, 1971).

Rexford Guy Tugwell, professor of economics at Columbia University, had high hopes in New Deal Policy, established by President Franklin Delano Roosevelt. The New Deal Policy sought to alleviate severe housing problems exacerbated by the economic crisis. At least 3,000 new towns were planned across the USA. Tugwell, as an adviser to President Roosevelt and one of the principal visionaries behind this initiative, proposed that the government acquire agricultural land outside existing cities to establish state-funded communities

intended for low-income residents of urban slums. Upon relocation, the substandard city dwellings would be demolished and replaced with new public parks. To implement this program, the Resettlement Administration was established. However, the project met strong opposition, particularly from conservative political circles, who argued that the formation of such new communities would amount to the introduction of socialism through the back door. Ultimately, only three projects were completed: Greenbelt near Washington, D.C, Maryland, Greenhills near Cincinnati, Ohio, and Greendale near Milwaukee, Wisconsin. Among them, Greenbelt stands out as a distinctive synthesis of Radburn's spatial composition and a decisively modernist architectural expression, comparable to the best housing developments of interwar Berlin and Frankfurt. Today, Greenbelt, like Radburn, is listed on the National Register of Historic Places, due in large part to the cooperative housing association that later became the owner of the town and succeeded in preserving its original character. As Peter Hall notes, the green belt towns are significant not because of their scale, but because they demonstrate that it was the American government, rather than the British, that first successfully constructed New Towns. In 1937, Tugwell resigned from his leadership position within the Resettlement Administration and from the Roosevelt administration, moving later to Greenbelt (Hall, 2002; Newton, 1971).

4.3. From the Garden Metropolis to the New Urbanism

The interwar and postwar urban planning in the USA was largely marked by an urban phenomenon called the Garden Metropolis (Weiss, 1990). The Garden Metropolis heavily relied on ideas of a British-born and naturalized USA urban planner Thomas Adams, the first manager of Letchworth's construction and member of the Garden City Association in England. In the USA, the Garden City concept was evident within urban decentralization and suburbanization that contributed to environmental reform and urban planning. Higher standards of lower-density housing with more open space and greenery were established. As a member of the Federal Housing Administration (FHA), Adams advocated for the private ownership of housing of the working class. He believed that FHA tools, such as "mortgage insurance program, its property and neighborhood standards and its Land Planning Division" (Weiss, 1990, p. 307) provided security for the residents. This phase of development required the combined action of planners, government agencies, private and public sectors, real estate markets and land zoning, as well as the existence of people willing to live in such suburbs. The undisputed role of the automobile as a major means of transportation turned the garden metropolis into a spacious collection of houses, within amorphous agglomerations of "the endless strings of suburbs" (Weiss, 1990, p. 307). Ultimately, the Garden Metropolis remains an antithesis of the Garden City concept, originally envisioned as the coordinated network of small healthy industrial towns with "large planned greenbelts to separate completely rural from urban land" (Weiss, 1990, p. 309). Regional planning was supposed to structure the land between communities yet was not considered in the formation of garden metropolises. The FHA activity and its urban impact was later criticized for its racist and class segregation politics (Weiss, 1990). The application of the Garden City concept in the USA points to some achievements in urban design, planning, and environmental reform. Simultaneously, the concept was detached from complex economic and social issues. Nevertheless, the quest for an optimal spatial form of contemporary urban civilization remains highly relevant, because the issues that Howard sought to address at the end of the nineteenth century continue to manifest globally, albeit in altered manifestations.

In recent decades, the measure of urban sustainability has been defined by the choice between brownfield and greenfield development locations. Although professional discourse generally advocates the utilization of brownfield sites within existing urban areas, the re-evaluation of the Garden City concept proposed a model of spatially sustainable development achieved through a dual process: the regeneration of brownfield sites and the establishment of new towns along intercity transport corridors. The critical challenge lies in determining the appropriate balance, i.e. the proportional relationship between these two approaches (Hall & Ward, 1998). Hence, Hall emphasized the necessity of a re-invention of the Garden City concept within the completely new context of the twenty-first century, when the need for planned urban development, he claims, is greater than ever before (Hall & Ward, 2014). In the latest phase of consideration of the Garden City concept in the USA, these views are gaining new application because the existing garden cities and suburbs, as well as satellite cities, are now brownfield sites in need of regeneration (Vernet & Coste, 2017).

Urban overpopulation, uncontrolled suburban sprawl, and the impact of automobile use on spatial development were subsequently addressed by the proponents of the New Urbanism movement. Their work seeks to conceptualize new urban planning parameters capable of responding to these challenges. Prominent figures in this movement include architects, planners, and urban designers Andrés Duany and Elizabeth Plater-Zyberk, both of whom were professors at the School of Architecture at University of Miami. Partners in professional and private life, they founded the architectural firm DPZ & Company in 1980. The firm focused on promoting planning practices that, through the creation of neighborhoods, would counteract the unmanageable expansion of suburbia. Their work gradually articulated what became known as the smart and sustainable development of settlements. One of their most renowned projects is Seaside, a settlement located in northwestern Florida and developed in 1980 (Congress for the New Urbanism, n.d.). Seaside represents the first settlement designed in a traditional, or rather “neo-traditional” manner, employing vernacular forms of architectural expression (McCann, 1995). Seaside settlement was modeled to evoke the character of southern American towns built before 1940. The settlement’s master plan, design, and construction regulations were based on the planning principles of landscape architect and urban planner John Nolen (Stephenson, 2002). The settlement is privately owned and developed under its own codes. Various architects participated in its construction. For the design of public buildings, architects were chosen based on their affinity for a particular architectural expression. For residential buildings, the projects were commissioned by the customers.

In 1993, Duany and Plater-Zyberk co-founded the Congress for the New Urbanism, a nonprofit organization dedicated to fostering human-scale communities and proposing alternatives to conventional suburban expansion. Initially referred to as “neo-traditional planning” the movement has since gained widespread application. To date, DPZ & Company has produced several hundred plans and projects emphasizing “walkable” urbanism, the creation of complete mixed-use neighborhoods, and the development of resilient regional systems. The firm’s projects span sites ranging from four to 4,000 ha, across the USA and internationally. The firm’s planning principles align closely with the US Green Building Council’s (USGBC) Leadership in Energy and Environmental Design (LEED) Green Building Rating System. Notably, DPZ & Company contributed to the development of the LEED for Neighborhood Development (LEED-ND) standards, the first national framework for environmentally sustainable planning and design in the USA. Within the New Urbanism, the Light Imprint Initiative was developed as a comprehensive methodological approach to sustainable urban practices. It integrates high-quality urban design,

thoughtful land development, and effective stormwater management in creating pleasant public spaces (Steuteville, 2017). The theoretical foundation for such methodologies can be traced to the Transect Concept, formulated by Duany in 1999 (Falk & Duany, 2020).

The theoretical planning behind the Transect Concept originates from multiple sources. It is intentionally grounded in the principles of ecology, exemplified by the works of Patrick Geddes, particularly his Valley Section Concept (1909); Ebenezer Howard and his Garden City concept (1898); and the research of geographer Alexander von Humboldt and his studies of plant geography in the Andes (1799–1803). The Transect Concept defines a continuum of zones transitioning from rural landscapes, characterized by dispersed farmsteads, to the densely populated urban core. In urban planning, this principle is interpreted as the antithesis of modern zoning and suburban expansion. It is based on the idea of creating a set of human habitats that differ in level and intensity of urban characteristics. The rural-to-urban spectrum serves as a basis for organizing the physical elements of human settlement and patterns of land use. Through Transect-based planning, the integrity of each environment, ranging from rural to urban, should be preserved, mirroring the balance found in natural ecological systems, where species coexist within habitats best suited to their needs. The Transect is structured into six zones. The first two possess a distinctly rural character: Natural Zone, i.e. permanently protected areas, and Rural Zone, areas of high ecological or scenic value that are not yet protected but may merit conservation. The Suburban Zone, located between the rural and urban environments, typically consists of detached single-family dwellings, sometimes complemented by schools and other public facilities. The General Urban Zone, which is the largest in most settlements, represents a primarily residential area of higher density and more diverse building types, supporting a greater degree of permitted mixed-used purposes. The two remaining urban zones are predominantly mixed-use: the Urban Centre Zone, made up of a small neighborhood center or larger city center, and the Urban Core Zone, the most intensely urbanized area, servicing the region or central business district (Falk & Duany, 2020).

The Transect zone classification points to similarities in the gradation of the urban environment and the functional zoning of Howard's Garden City (Vernet & Coste, 2017). Although the Transect concept, according to Talen (2002), still deals with more complex patterns of immersive environments, placing them in a regional framework, in this context, the extraordinary longevity and persistence of Howard's idea has been re-emphasized within the New Urbanism movement as relevant for contributing to the alleviation of some of the environmental problems of the twenty-first century (Duany & DPZ, 2012).

5. Conclusion

The Garden City Concept achieved success not as a social, but as an urban planning movement. This is particularly evident in its application in the USA, where it ultimately served for addressing urban planning challenges. The implementation of the Garden City concept in the USA did not constitute a one-sided or one-dimensional communication, but rather a complex, multilayered exchange of theoretical and practical knowledge in urban planning. The American experience, perhaps more than any other, demonstrates that Howard's theory extended far beyond the creation of a physical diagram of modern city life and design of related physical structures. It significantly influenced critical reflections on the optimal modalities of urban development. In a complex spatial contemporary context, the Garden City concept requires consideration in a broader, geographical discourse. Through the geographical lens, implementations of the concept

reveal how planning ideas interact with broader spatial processes and how their meaning shifts across scales and regions. Recent scholarship demonstrates that critically reinterpreted principles of the Garden City concept can inform research on climate-sensitive planning, landscape-based urbanism, restructuring of suburban and peri-urban areas, and many other issues (Gillette, 2012; Khavarian-Garmsir et al., 2023; Spórna et al., 2025; van der Gaast et al., 2020).

Diverging from the Howard's model, the newly formed communities in the USA mostly strengthened prevailing traditions of material urban culture and resulted in a community form largely in accordance with the values of twentieth-century industrial capitalism (Clevenger, 2025). However, despite the limited reformist potential recognized throughout the diverse materializations of the concept, its relevance remained high for urbanism, architecture, landscape architecture, and sustainable planning and design. Vernet and Coste (2017) advocate for critical role of garden cities in forming "territorialized energy ecosystem model, promoting interactions between the latent territorial resources and the capacities of local actors to generate individual and collective projects for the benefit of a common autonomy, and thus a shared habitability" (p. 56). Therefore, the contemporary American interpretation of the Garden City by the New Urbanism movement provides a deep and accurate understanding of the importance of the metabolism of cities, their production and consumption, including the territorial production of renewable energy sources achieved along the existing characteristics of Howard's community model. Such an approach further points to evolving new theoretical models for more integrated urban systems in meaningful dialogue with local communities. The reinterpretation of the Garden City within the New Urbanism movement additionally illustrates its enduring geographical relevance.

The overall character of this productive transatlantic dialogue confirms that the USA experience was both the source of inspiration and the fertile testing ground for ideas proposed by Ebenezer Howard. This study outlines the limits of the implementation of the Concept in the context of the USA yet reinforces its capacity to balance socio-spatial relations in town and regional planning. The New Urbanism approach also reveals that its models of cities are mainly related to low housing densities. Nevertheless, they also raise and examine important issues of walkability (Duany & Steuteville, 2021), mixed land use, and the spatial organization of communities. However, currently prevalent high-density urbanization world-wide indicates the necessity to design sustainable models of high-density cities (Nikologianni & Larkham, 2022). The contemporary moment poses the task of resolving such tensions and moving from limited idealized models to flexible spatial strategies that can reconcile compactness with environmental quality and social cohesion. Howard originally proposed a spatial organization intrinsically aligned with the social structure of the community. This study additionally highlights frequently overlooked but central message of the Garden City concept that the success of a community depends on stable internal relationships, which are created, maintained, and cultivated through a distinct spatial development that acknowledges and respects the relationships between people and their environment. The concept of the Garden City should be understood as a historically conditioned, yet geographically significant discourse for exploring the new types of organization of urban space. Its enduring value lies not in the prescribed repetition of urban form, but in its ability to inform geographically grounded approaches to balanced and sustainable urban transformation and development. By situating the Garden City within the framework of urban and human geography, this paper highlights its newly discovered value as an analytical lens for examining the interactions between spatial structure, social relations, and environmental conditions in urban and regional development.

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References

- Batchelor, P. (1969). The Origin of the Garden City Concept of Urban Form. *Journal of the Society of Architectural Historians*, 28(3), 184–200. <https://doi.org/10.2307/988557>
- Beevers, R. (1988). *The Garden City Utopia, A Critical Biography of Ebenezer Howard*. Palgrave Macmillan Press.
- Bolz, C. (2011). Constructing "Heimat" in the Ruhr Valley: Krupp Housing and the Search for the Ideal German Home 1914–1931. *German Studies Review*, 34(1), 17–34. <https://www.jstor.org/stable/41303654>
- Buder, S. (1969). Ebenezer Howard: the Genesis of a Town Planning Movement. *Journal of American Institute of Planning*, 35(6), 390–398. <https://doi.org/10.1080/01944366908977258>
- Buder, S. (1990). *Visionaries & Planners: The Garden City Movement and the Modern Community*. Oxford University Press.
- Burke, G. (1971). *Towns in the making*. Edward Arnold Ltd.
- Clevenger, S. M. (2025). *Physical Culture and the Biopolitics of the International Garden City Movement: Planning Healthy Recreation*. Palgrave Macmillan Cham.
- Coleman, W. E. (1994). Frederick Law Olmsted, Jr., the Garden City Movement, and the Design of Forest Hills Gardens. *Forest Hills Gardens*, 83(2), 8–14. <http://www.foresthillsgardensfoundation.org/wp-content/uploads/2016/11/the-maps-of-forest-hills-gardens.pdf>
- Congress for the New Urbanism. (n.d.) *Seaside*. Retrieved August 16, 2025 from <https://www.cnu.org/what-we-do/build-great-places/seaside>
- Creese, W. L. (1966). *The Search for Environment – The Garden City: Before and After*. Yale University Press.
- Ćorović, D. (2008). *Primena koncepta vrtnog grada u Beogradu u periodu između dva svetska rata* [Implementation of the Garden City Concept in Belgrade in the Period Between the Two World Wars, Master thesis]. University of Belgrade – Faculty of Architecture.
- Ćorović, D. (2009). *Vrtni grad u Beogradu* [Garden City in Belgrade]. Zadužbina Andrejević.
- Ćorović, D. (2014). The Garden City Concept in the Urban Discourse of Interwar Belgrade. In J. Bogdanović, L. Filipovitch Robinson, & I. Marjanović (Eds.), *On the very Edge, Modernism and Modernity in the Arts and Architecture, of Interwar Serbia, 1918-1941* (pp. 201–222). Leuven University Press. https://www.researchgate.net/publication/281618917_The_Garden_City_Concept_in_the_Urban_Discourse_of_Interwar_Belgrade
- Ćorović, D. (2025). Koncept vrtnog grada: ispitivanje i interpretacija značenja [The Garden City Concept: Examining and Interpreting Meaning]. In R. Mrlješ (Ed.), *Zeleni grad i graditeljsko nasleđe* [Green city and architectural heritage, pp. 102–116]. Zavod za zaštitu spomenika kulture grada Beograda.
- Ćorović, D., Milinković, M., Vasiljević, N., Tilinger, D., Mitrović, S., & Vuksanović-Macura, Z. (2024). Investigating Spatial Criteria for the Urban Landscape Assessment of Mass Housing Heritage: The Case of the Central Zone of New Belgrade. *Land*, 13(7), Article 906. <https://doi.org/10.3390/land13070906>
- Duany, A., & DPZ (2012). *Garden Cities: Theory & Practice of Agrarian Urbanism*. Prince's Foundation.
- Duany, A., & Steuteville, R. (2021). Defining the 15-Minute City. Retrieved September 24, 2025 from <https://www.cnu.org/publicsquare/2021/02/08/defining-15-minute-city>
- Falk, B., & Duany, A. (2020). *Transect Urbanism: Readings in Human Ecology*. ORO Editions.
- Gillette, H. (2012). *Building Better Communities, from the Garden City to the New Urbanism*. University of Pennsylvania Press.
- Guerra, M. W., Abarkan, A., Romón, C., & Pekár, M. (Eds.) (2023). *European Planning History in the 20th Century*. Routledge.

- Hall, P. (2002). *Cities of Tomorrow: An Intellectual History of Urban Planning and Design in the Twentieth Century*. Blackwell Publishers.
- Hall, P., & Ward, C. (1998). *Sociable Cities: The Legacy of Ebenezer Howard*. John Wiley & Sons.
- Hall, P., & Ward, C. (2014). *Sociable Cities: The Legacy of Ebenezer Howard*. Routledge.
- Howard, E. (1898). *To-morrow: A Peaceful Path To Real Reform*. Swan Sonnenschein & Co.
- Howard, E. (1902). *Garden Cities of Tomorrow*. Swan Sonnenschein & Co., Ltd. Retrieved September 18, 2025 from https://www.gutenberg.org/files/46134/46134-h/46134-h.htm#Page_22
- Howard, E. (1965). *Garden Cities of Tomorrow*. The MIT Press.
- Khavarian-Garmsir, A. R., Sharifi, A., Hajian Hossein Abadi, M., & Moradi, Z. (2023). From Garden City to 15-Minute City: A Historical Perspective and Critical Assessment. *Land*, 12(2), Article 512. <https://doi.org/10.3390/land12020512>
- Klaus, S. L. (2002). *A Modern Arcadia: Frederick Law Olmsted, Jr., and the Plan for Forest Hills Gardens*. University of Massachusetts Press.
- Knight, F. (2023). *Ebenezer Howard: Inventor of the Garden City*. Oxford University Press.
- Kobayashi, A. (2017). Spatiality. In D. Richardson, N. Castree, M. F. Goodchild, A. Kobayashi, W. Liu, & R. A. Marston (Eds.), *The International Encyclopedia of Geography*. John Wiley & Sons, Ltd.
- Kostof, S. (2001). *The City Shaped: Urban Patterns and Meanings Through History*. Thames and Hudson.
- McCann, E. J. (1995). Neotraditional Developments: The Anatomy of a New Urban Form. *Urban Geography*, 16(3), 210–233. <https://doi.org/10.2747/0272-3638.16.3.210>
- Miller, M. (2002). *Letchworth, The First Garden City*. Phillimore & Co. Ltd.
- Miller, M. (2015). Commemorating and celebrating Raymond Unwin (1863–1940). *Planning Perspectives*, 30(1), 129–140. <https://doi.org/10.1080/02665433.2014.956783>
- Newton, N. T. (1971). *Design on the Land: The Development of Landscape Architecture*. The Belknap Press of Harvard University Press.
- Nikologianni, A., & Larkham, P. J. (2022). The Urban Future: Relating Garden City Ideas to the Climate Emergency. *Land*, 11(20), Article 147. <https://doi.org/10.3390/land11020147>
- Panerai, P., Castex, J., Depaule, J.-C., & Samuels, I. (2004). *Urban Forms: The Death and Life of the Urban Block*. Routledge.
- Perry, C. (2020). “The Neighborhood Unit” from The Regional Plan of New York and its Environs (1929). In R. T. LeGates, F. Stout, & R. W. Caves (Eds.), *The City Reader* (pp. 557–569). Routledge.
- Spórna, T., Sudra, P., Figlus, T., Musiaka, T., Kryczka, P., Lisowska-Kierepka, A., Sikorski, D., & Szmytkie, R. (2025). From idea to urban form: The evolution of Howard's concept and typology of historical garden cities in Poland. *Journal of Historical Geography*, 90, 64–77. <https://doi.org/10.1016/j.jhg.2025.09.004>
- Stephenson, B. (2002). The Roots of the New Urbanism: John Nolen's Garden City Ethic. *Journal of Planning History*, 1(2), 99–123. <https://doi.org/10.1177/153132001002001>
- Steuteville, R. (2017, May 15). Great idea: Light Imprint for Walkable Green Infrastructure. *Public Square. A CNU Journal*. Retrieved September 24, 2025 from <https://www.cnu.org/publicsquare/2017/05/15/great-idea-light-imprint-walkable-green-infrastructure>
- Tafari, M. (1976). *Architecture and Utopia: Design and Capitalist Development*. The MIT Press.
- Talen, E. (2002). Help for Urban Planning: The Transect Strategy. *Journal of Urban Design*, 7(3), 293–312. <http://doi.org/10.1080/1357480022000039349>
- van der Gaast, K., van Leeuwen, E., & Wertheim-Heck, S. (2020). City-Region Food Systems and Second Tier Cities: From Garden Cities to Garden Regions. *Sustainability*, 12(6), Article 2532. <https://doi.org/10.3390/su12062532>
- Vernet, N., & Coste, A. (2017). Garden Cities of the 21st Century: A Sustainable Path to Suburban Reform. *Urban Planning*, 2(4), 45–60. <https://doi.org/10.17645/up.v2i4.1104>
- Weiss, M. A. (1990). Developing and Financing the ‘Garden Metropolis’: Urban Planning and Housing Policy in Twentieth-century America. *Planning Perspectives*, 5, 307–319. <https://doi.org/10.1080/02665439008725712>