



Trend Research of City Center Public Open Space Transformation: A Systematic Literature Review

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Abstract

The transformation of city centers is crucial for enhancing sustainability and livability, as urban environments face increasing challenges from rapid urbanization and environmental degradation. As urban areas continue to expand and evolve, the need for sustainable practices becomes increasingly urgent. The city center, often the heart of urban life, plays a pivotal role in shaping social interactions, economic activities, and environmental impacts. The transformation of city center and their public open spaces is a multifaceted process that requires careful consideration of design, community engagement, and accessibility. By prioritizing these elements, urban planners and policymakers can create vibrant, inclusive, and sustainable urban environments that enhance the quality of life for all residents. This research aims to see Research Trends and Future Direction using the method of A systematic Literature reviews with databases derived from Scopus and WOS (Web of Science) and in data management and data analysis using Bibliometrix, R-Studio and Biblioshiny applications. This research looks at reviews several documents related to the most productive authors and the most cited articles. In addition, it also looks at topic trends, theme mapping and method research formed to see trends in research topics and future research. After processing the data, the results obtained that "Public Space" is most keyword used and is also still an opportunity in research. In addition, the themes of City Center, Tourism and Urban Regeneration are future themes that need to be discussed more in the city center public open space transformation.

Keywords: city center, open public space, systematic literature review, transformation

1. Introduction

City centers, often referred to as downtowns or central business districts, serve as the nucleus of urban life, embodying economic, cultural, and social interactions. City centers are pivotal to the structure and function of urban areas. City centers serve as pivotal nodes within urban environments, characterized by a concentration of socio-economic activities and cultural interactions. The identification and understanding of city centers have evolved, especially as urban landscapes become increasingly complex and polycentric. Large cities often exhibit multiple centers of activity rather than a singular focal point, necessitating a nuanced approach to urban planning and development (Roth et al., 2011; Sun et al., 2016). The changes and challenges that arise from an increase in urban population sizes can already be observed in contemporary metropolitan regions (Schima et al., 2019). This polycentric nature complicates traditional notions of urban movement and economic activity, leading to challenges such as traffic congestion and

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urban sprawl, which are exacerbated by the intricate networks of human mobility and socio-economic interactions (Roth et al., 2011; Tsekeris & Geroliminis, 2013).

The transformation of city centers and their associated public open spaces is a critical aspect of urban development, reflecting broader socio-economic trends and community needs. Public open spaces (POS) play a vital role in enhancing urban livability, promoting social interaction, and fostering community identity. The design and management of these spaces are increasingly recognized as essential for creating equitable and sustainable urban environments. A well-planned layout of public open spaces can significantly improve the quality of life for urban residents. Transformation processes are focused on the repurposing of hard infrastructure into public spaces, these processes are implemented with the objective of ensuring continuity of place-based social and physical features (Schuur et al., 2024). These spaces not only serve as venues for social interaction but also enhance ecological sustainability by providing green areas that contribute to urban biodiversity (Dong et al., 2022). For instance, the importance of spatial equity in public open spaces, suggesting that equitable access can lead to improved social inclusion and community cohesion (Dong et al., 2022). The successful public open spaces allow communities to express their cultural identities and engage socially in safe environments (Mutawe & Asfour, 2022).

The transformation of public open spaces is often driven by community engagement. This participatory approach not only empowers residents but also ensures that the spaces reflect the diverse needs and preferences of the community (Boeri et al., 2022a). However, the quality of public open spaces is paramount for their success. Poorly designed or maintained spaces can lead to underutilization and may even contribute to social isolation. Ahirrao and Khan emphasize The physical attributes of public spaces, such as legibility and connectivity, are crucial in determining their usability and attractiveness (Carmona, 2019; Thombre & Kapshe, 2022), the design of public open spaces significantly influences physical activity levels among urban residents. Additionally, the necessity of adhering to universal design principles to ensure accessibility for all, particularly for individuals with disabilities (Ahirrao & Khan, 2021). The transformation of public spaces is a complex endeavor that requires a holistic approach, integrating user perceptions, community engagement, spatial equity, and thoughtful design. By prioritizing these elements, urban planners and policymakers can create vibrant public spaces that serve as essential components of urban life, fostering social interaction and enhancing the overall quality of life for residents. Despite the proliferation of research on the subject of tourism-oriented urban change, there remains a paucity of attention devoted to the role of urban policy in catalyzing this transformation (Kowalczyk-Anioł, 2023). The transformation of city centers and their public open spaces is a multifaceted process that requires careful consideration of design, community engagement, and accessibility. By prioritizing these elements, urban planners and policymakers can create vibrant, inclusive, and sustainable urban environments that enhance the quality of life for all residents.

This article was constructed using the systematic literature review (SLR) technique. A systematic literature review (SLR) on the transformation of city center public open spaces (POS) necessitates the implementation of a methodical strategy for the identification, evaluation, and synthesis of current research on the subject. This strategy serves two purposes: first, it facilitates comprehension of the extant state of knowledge; second, it identifies gaps and potential future research areas. The objective of a comprehensive literature evaluation is to identify research trends and potential future research avenues related to the topic of urban public open space transformation in city centers. A comprehensive analysis of the literature on the transformation of urban public spaces may provide insights into their function within the urban environment. Those engaged in research who adopt a systematic approach can contribute to the body of knowledge and enhance urban planning strategies that promote sustainability and community engagement.

2. Method

This article employs the systematic literature review method. The systematic literature review (SLR) method is a structured approach to identifying, evaluating, and synthesizing existing research on a specific topic. This methodology is distinguished by its meticulous and transparent procedures, which are designed to minimize bias and enhance the dependability of the findings. The SLR process typically encompasses several pivotal phases, including planning, conducting, and reporting the review. These stages are vital for guaranteeing the quality and reproducibility of the research outcomes. A well-defined strategy is essential to guarantee the replicability and scientific value of the SLR, thus distinguishing it from traditional narrative reviews (Borrego et al., 2014). Systematic literature reviews can offer insights that are both valuable and well-founded, thus providing a solid foundation for further research (Turk, 2021). Furthermore, the PRISMA diagram is employed as a tool for the systematic filtering of selected articles. The PRISMA guidelines are frequently utilized to guarantee that systematic reviews are documented in a transparent and comprehensive manner. The PRISMA approach comprises a series of stages and tasks, as illustrated in Figure 1. The Scopus and WOS (Web of Science) database was selected for its comprehensive coverage of publications on city center and open public space transformation. The following is a table of criteria for selecting and sorting articles that will be used in the systematic literature review.

Table 1: Criteria Article

Source Criteria	Scopus	WOS (Web of Science)
Keyword	"city center" AND "public open space" OR "public open space transformation" OR "city center transformation" OR "city center public open space transformation"	city center public open space transformation
Document Type	Article, Conference paper	Article, Conference paper,
Language	English	English
	25 documents	66 documents

Source: Scopus and WOS

This research uses the R studio application to generate bibliometric data that is very useful in the *systematic literature review* (SLR) process. R Studio combines data obtained from Scopus and WOS (Web of Science) and reads as many as 91 articles. The following PRISMA diagram is the steps in screening articles that will be processed in Biblioshiny R which is a web-based R Studio advanced application to manage, browse, and share their literature collection easily.

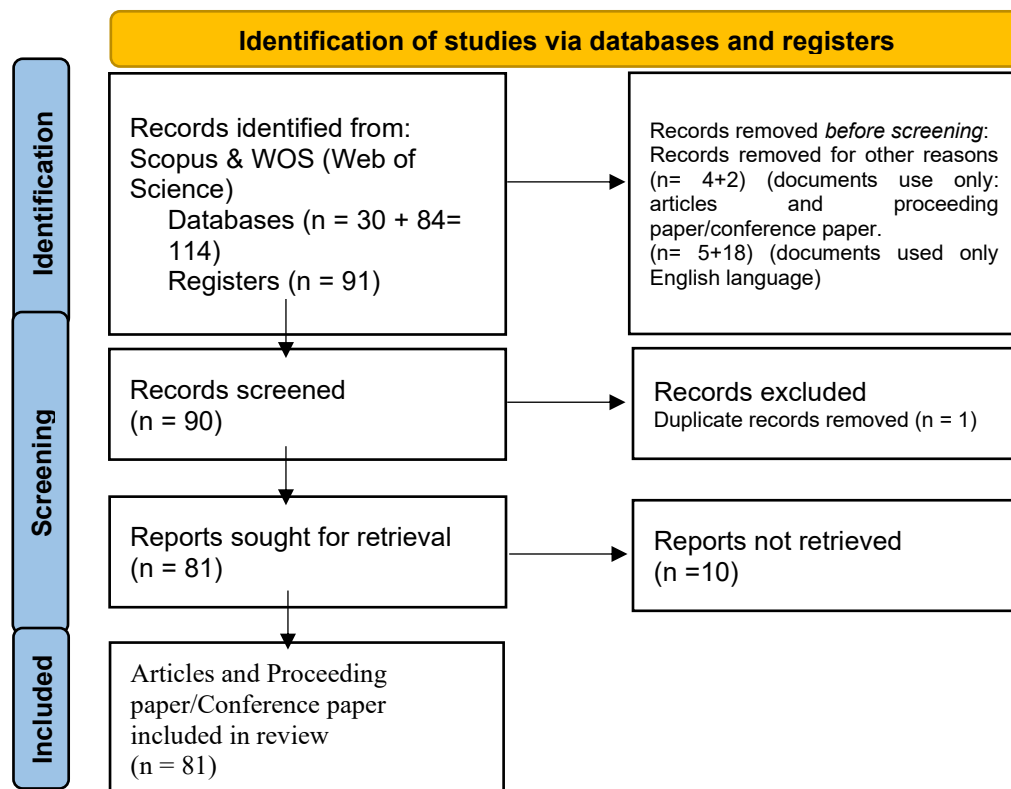


Figure 1. The Process of Selecting Articles Using the Prisma Adoption Diagram
(Author's Analysis, 2025)

It can be seen from the diagram above that of the 91 articles obtained from Scopus and WOS (Web of Science) with the keywords "city center" AND "public open space" OR "public open space transformation" OR "city center transformation" OR "city center public open space transformation" and "city center public open space transformation" that match the theme "City Center Public Open Space Transformation" are 81 articles. These articles are obtained from several filters including document type, duplication, and language, then re-screening by looking at keywords and reading abstract documents.

3. Result and Discussion

3.1 Relevant Publication

There are several articles from 81 resulted from the PRISMA approach, while following are the resume of those. These articles are cited from authors who have written extensively on the topic and the most cited articles based on Bibliometrix data.

Table 2: Discussion of Articles from Most Global Cited Documents

No.	Author	Discussion
1.	Boeri et al. (2022)	In the context of urban planning, environmental considerations assume a significant role.
2.	Boeri et al. (2020)	The introduction of the concept of temporary transformation in urban spaces has emerged as a viable approach to increase community engagement and sustainability.
3.	Boeri et al. (2017)	The evaluation of various scenarios is essential for providing insights into the effectiveness of different greening strategies within specific architectural and economic constraints.
4.	Yeh et al. (2015)	This study explores the profound changes in China's urban spatial structure following economic reforms.
5.	Loures, (2015)	The focus of this study is the specific context of post-industrial landscapes and their potential for urban redevelopment.
6.	Groth & Corijn, (2005)	This study provides a critical examination of urbanity in the context of contemporary urban development. It emphasizes the role of informal actors and indeterminate spaces in shaping the urban agenda.

Source: Author's Analysis, 2025

Boeri et al. (2022) discusses the theme "City Center of Public Open Space Transformation" which is about environmental considerations which are an important factor in urban planning. They emphasize the integration of green solutions and community engagement strategies is important to promote inclusive and resilient cities. Vegetation in urban areas not only reduces the impact of heat waves through shading and evapotranspiration but also improves water management by reducing runoff and increasing permeability. The adoption of blue solutions, such as water blades and temporary ponds, is increasingly contributing to urban resilience by managing heavy rainfall and preventing flooding also becoming important idea. According to them these strategies underscore the need to incorporate ecological principles into urban design to effectively address climate challenges.

In the other article, Boeri et al. (2020) introduce the concept of temporary transformation in urban spaces has emerged as a viable approach to increase community engagement and sustainability. By recognizing and valuing cultural heritage, cities can reactivate underutilized spaces through participatory practices and co-design initiatives. Such strategies not only improve microclimate conditions but also foster a sense of community ownership and responsibility for the shared urban environment. Boeri et al., (2017) suggest the use of innovative models and simulations to assess the impact of green surfaces on urban heat islands (UHIs) further illustrates the potential of evidence-based approaches in urban planning. This methodology enables the evaluation of various scenarios, providing insights into the effectiveness of different greening strategies within specific architectural and economic constraints. The interplay between economic transition, environmental sustainability, and community engagement is critical in shaping the future of urban spaces. The synthesis of these elements can result in more resilient, inclusive and sustainable urban environments that not only address current challenges but also anticipate future needs.

The articles provide valuable insights into the dynamics of urban transformation and redevelopment in the context of economic transition and post-industrial landscapes. Yeh et al., (2015) explores the profound changes in China's urban spatial structure following economic reforms, highlighting the interaction between state and market forces. They argue that these reforms have led to accelerated urbanization and significant changes in the urban fabric, characterized by the emergence of new urban spaces and increasing regional disparities. This transformation reflects a convergence with urban patterns in the West, showing that economic transition not only changes the economic landscape but also reshapes social class and urban identity. Instead, Loures (2015) focuses on the specific context of post-industrial landscapes and their potential for urban redevelopment. This study emphasizes the two perspectives of communities and experts regarding the reuse of these sites. Loures (2015) identify benefits, such as revitalization of urban areas and promotion of sustainable practices, as well as barriers, including community resistance and the complexity of the regulatory framework. This discussion complements the findings of Yeh et al., (2015) by illustrating how urban redevelopment can serve as a response to the challenges posed by economic transition, particularly in a post-industrial context.

Article written by Groth & Corijn (2005) provides a critical examination of urbanity in the context of contemporary urban development, emphasizing the role of informal actors and indeterminate spaces in shaping the urban agenda. Groth & Corijn (2005) argues that traditional urban planning models, which often prioritize monofunctional zoning and the elimination of vernacular architecture, have led to a loss of the normative essence of urbanity defined as a confrontation with diversity and the unexpected. This perspective is particularly relevant when considering the implications of economic transition and urban redevelopment, as discussed in the work of Yeh et al., (2015) and Loures (2015).

Yeh et al., (2015) highlights the transformative impact of economic reforms in China, which have resulted in significant urban spatial changes, including the emergence of new urban spaces and increasing disparities between regions. The findings suggest that rapid urbanization and economic restructuring have created complex urban landscapes that require innovative approaches to planning and development. Emphasis Groth & Corijn (2005) on the need for more inclusive and participatory urban governance is in line with this idea, as it suggests that urban redevelopment should not only focus on economic efficiency but also consider the social and cultural dimensions of urban life. Loures (2015) complements this discussion by examining the challenges and opportunities associated with reusing post-industrial landscapes. The study

identifies community and expert perspectives on the benefits of revitalizing such sites, such as promoting sustainability and improving urban livability, while overcoming barriers such as regulatory complexity and community resistance.

Insights from Groth & Corijn (2005) and Yeh et al., (2015) underlines the importance of adopting a holistic approach to urban transformation. This approach should integrate economic, social and environmental considerations, recognizing the value of informal actors and the need for participatory governance in shaping urban futures. The linkages between economic transition and urban redevelopment are therefore framed as dynamic processes that require careful navigation of the diverse interests and complexities of urban life.

3.2 Trend Research

Trend research on the theme of City Center Open Public Space Transformation can be seen from the most cited articles data from Bibliometrix. It can be seen that this is the most trending document to be discussed in research to date. The most cited articles are Groth & Corijn, (2005) with 176 citations, Loures, (2015) with 100 citations, Yeh et al., (2015) with 91 citations, and Cybriwsky (1999) with 82 citations.

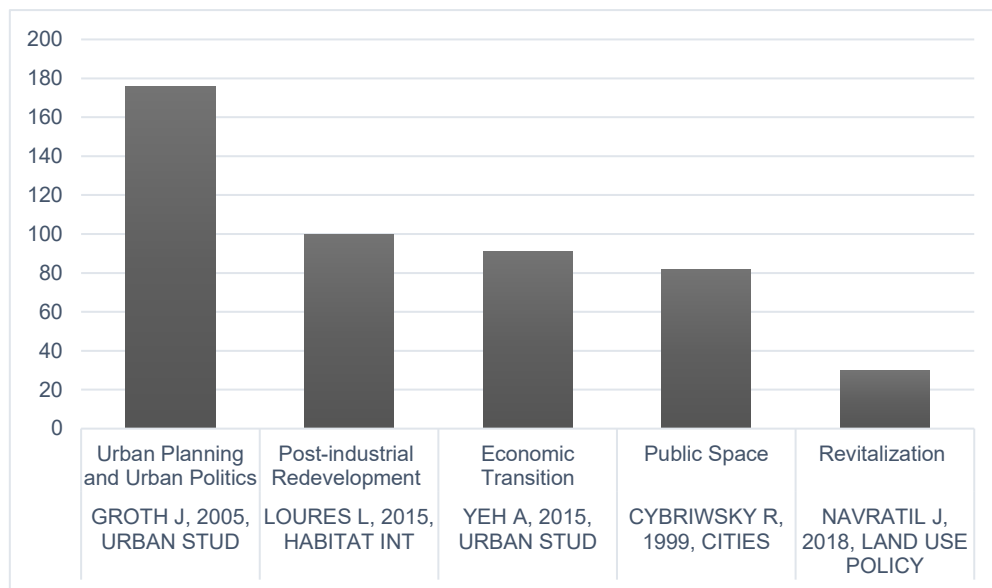


Figure 3. Trend Research
(Bibliometrix processed by author, 2024)

The most trending and most cited research is on the theme of Urban Planning and Urban Politics. The interplay between urban planning and politics in the context of urban transformation necessitates a reevaluation of strategies that prioritize inclusivity and responsiveness to the diverse needs of urban populations, ensuring that urban spaces remain accessible and reflective of their communities. The themes of post-industrial redevelopment, economic transition, public space, and revitalization are research trends that are also widely cited in urban transformation research. Post-industrial redevelopment is a crucial aspect of urban transformation, particularly in addressing the challenges posed by urban sprawl and the need for sustainable land use. The economic transition, characterized by a shift from a centrally planned economy to a more market-oriented system, has significantly influenced urban transformation. In addition, the theme of the transformation of urban public spaces is a critical aspect of contemporary urban studies, particularly as cities evolve from industrial to post-industrial frameworks. This shift is characterized by the increasing privatization of previously public areas, which often leads to a reduction in accessible communal spaces.

3.3 Variety Themes and Research Focus

To find out the focus and trends of research, it is important to identify the most used keywords in articles, one of which is the use of abstract keywords or words that are often used in articles. Each type of keyword helps researchers to get an overall picture of the research and emphasize certain areas. Figure 3 provides an overview of the words that frequently appear in the articles. It can be seen that the word "Public Space" dominates, followed by the words "urban", "public open space", "urban regeneration", "urban space", and other words.



Figure 4. Wordcloud keywords
(Bibliometrix, 2024)

Figure 4 illustrates the most frequently used words in the keyword themed city center open public space transformation. This is because the word "Public Space" dominates, followed by the words "urban", "public open space", "urban regeneration", "urban space", and other words that appear related to the topic of "City Center Open Public Space Transformation" and are most often discussed by article authors. The keywords that appear also indicate that these keywords are trending topics that are interesting to discuss.

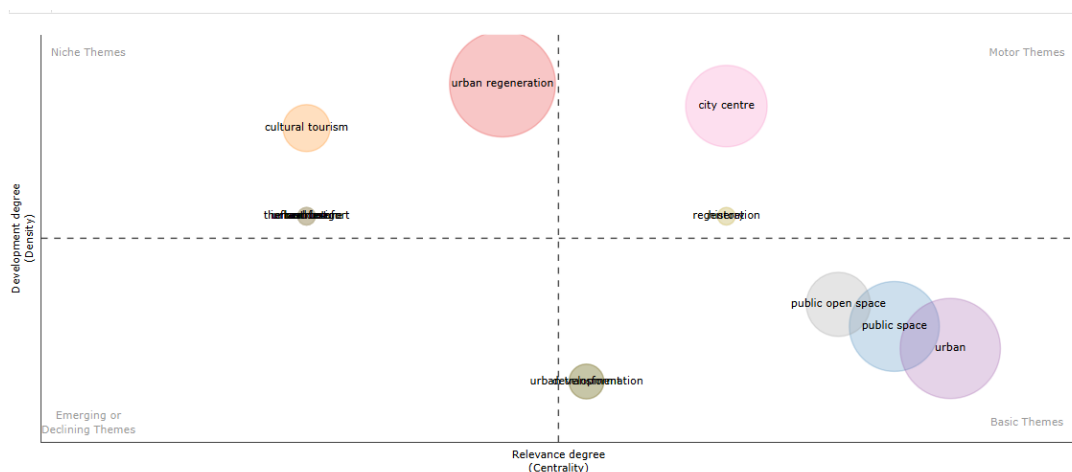


Figure 5. Thematic map
(Bibliometrix, 2024)

The thematic map above provides information about the keywords that appear on the research topic "City center Public Open Space" based on the quadrant density (y-axis) and centrality (x-axis). The concept of centrality serves to underscore the significance of the selected theme, whereas the notion of intensity pertains to the progression of the theme in question (Koçyiğit et al., 2023). Based on thematic map in Figure 4 below it can be understood that in the quadrant Motor Themes are the most discussed topics in the field and should be developed. City Center and Regeneration were in the motor themes. There are no themes that fall under emerging or declining themes. These themes contained weaker keywords than other themes. Public Open Space, Public Space, dan Urban were in the basic themes. These themes were relevant to the research field but needed further development. The upper left quadrant consists of niche themes, which are well-developed but isolated (niche) or highly specialized themes (Zhidebekkyzy et al., 2024). Niche clusters include cultural tourism, urban design, and urban regeneration. The more the theme is on the right (y-axis), the more the density of research on the theme, and the more the theme is above (x-axis), the more the centrality of the theme leads to the topic. Based on this, themes that have the opportunity to be researched are in Niche themes and Motor themes, because they have high centrality but publications are still lacking so that research on these themes needs to be developed.

A. *City Center*

The development and transformation of city centers have become focal points in urban studies, particularly in the context of urban entrepreneurialism and the integration of playful public spaces. Urban entrepreneurialism, as articulated by Hertting et al., (2022), reflects a shift in urban governance that emphasizes competition among cities and the role of private actors in shaping urban landscapes (Hertting et al., 2022). Urban development strategies become accepted as common practice, often sidelining public discourse and community engagement (Hertting et al., 2022). This normalization can lead to a prioritization of economic interests over social needs, raising questions about the inclusivity and accessibility of urban spaces (Hertting et al., 2022). In contrast, in the research Amati et al., (2024), the concept of play in urban design has gained traction as a means to enhance public engagement and social interaction in city centers and urban design can prioritize pedestrian experiences and reduce vehicular dominance, thereby fostering healthier urban environments. These Designs not only aim to decrease pollution and traffic but also create spaces that encourage social interaction and playful engagement among residents (Amati et al., 2024). The integration of play into urban planning is supported by evidence that highlights its benefits for physical and mental health, particularly for children, who thrive in environments that allow for exploration and socialization (Amati et al., 2024).

Moreover, the presence of natural elements, such as water features, has been shown to enhance children's interactions in urban settings, making city centers more appealing and engaging for families (Bozkurt et al., 2019). By incorporating such elements into city center designs, urban planners can create multifunctional spaces that cater to diverse populations and promote active lifestyles (Bozkurt et al., 2019). In summary, the evolution of city centers reflects a complex interplay between urban entrepreneurialism and the incorporation of playful, inclusive public spaces. While the normalization of entrepreneurial strategies can lead to economically driven urban development, the integration of play and natural elements offers a counter-narrative that emphasizes community engagement and social well-being. Future urban planning efforts must balance these dynamics to create vibrant, accessible, and sustainable city centers that meet the needs of all residents.

B. *Urban Regeneration*

Urban regeneration is a multifaceted process that seeks to revitalize and transform urban areas, particularly those that have experienced decline or disinvestment. This process often involves a combination of community engagement, environmental sustainability, and innovative design strategies. Recent studies highlight the importance of participatory practices and green infrastructure in achieving successful urban regeneration outcomes. One of the key aspects of urban regeneration is community engagement, which is essential for fostering a sense of ownership and responsibility among residents (Boeri et al., 2022b). Boeri emphasizes that community involvement through co-design, co-production, and self-management can lead to more resilient urban environments. These practices not only enhance the physical transformation of spaces but also promote social inclusion and environmental sustainability (Boeri et al., 2022b). Participatory interventions were implemented to improve public spaces, demonstrating how local stakeholders can contribute to urban regeneration efforts (Boeri et al., 2022b).

The role of public markets in urban regeneration also cannot be overlooked. Fuertes illustrates how market have evolved to become central components of the urban food system, supporting local economies and fostering community ties. These markets not only provide access to fresh produce but also serve as social hubs that contribute to the regeneration of their surrounding neighborhoods (Fuertes & Gomez-Escoda, 2022). Urban regeneration is a dynamic process that benefits from community engagement, green infrastructure, and the revitalization of local markets. The integration of these elements can lead to more sustainable, inclusive, and resilient urban spaces. As cities continue to face the challenges posed by climate change and urbanization, adopting innovative strategies that prioritize community involvement and environmental stewardship will be essential for successful regeneration efforts.

C. *Cultural Tourism*

Cultural tourism plays a pivotal role in the transformation of open spaces, particularly in urban contexts where historical and cultural assets can be leveraged for economic and social revitalization. Cultural tourism can stimulate urban regeneration with integrates tourism with local community engagement and urban planning, thereby enhancing the local economy and preserving cultural heritage (Antonić et al., 2024). These developments have not only revitalized physical spaces but have also invigorated the local cultural scene, prompting increased private sector investment and fostering a more vibrant community life. This trend is indicative of a broader pattern where cultural tourism serves as a catalyst for urban regeneration, particularly in medium-sized cities that face challenges such as population decline and economic stagnation (Antonić et al., 2024). Many cultural events and intangible heritage elements, such as traditional crafts, remain underrepresented in the tourism market, highlighting the need for strategic planning and marketing to attract visitors. The challenge lies in balancing tourism development with the preservation of local identity and community cohesion, as unrestrained commercial growth can threaten the essence of neighborhoods and their resident populations (Maturana et al., 2019). Unique cultural and social fabric, contributes to the overall urban experience, suggesting that successful cultural tourism initiatives must consider the specific characteristics and needs of local communities. This perspective reinforces the idea that cultural tourism should not only focus on economic benefits but also prioritize the social and cultural dimensions of urban life (Maturana et al., 2019). The experiences of research illustrate the complex interplay between tourism, urban

development, and community dynamics, emphasizing the need for a holistic approach to cultural tourism that respects and enhances the unique characteristics of each urban area.

3.4 Variety of Research Method

Table 3 is a comparison or comparison of research methods used in articles. In this case, the research methods that will be compared come from articles discussed previously, namely articles discussed in the Most Relevant Authors section, Most Global Cited Documents, and articles discussed in thematic themes.

Table 3: Methods used in research

No.	Method Used	Authors
1.	A mixed-method approach, integrating qualitative elements such as participatory practices and community engagement with quantitative assessments of the impacts of temporary urban transformations. This combination allows for a comprehensive evaluation of both the social dynamics and measurable outcomes of urban regeneration efforts.	(Boeri et al., 2020)
2.	A mixed-method approach, combining qualitative insights from community engagement with quantitative evaluations of greening interventions' effectiveness in urban settings. This methodology allows for comprehensive assessment and adaptation of practices aimed at enhancing urban resilience and sustainability.	(Boeri et al., 2022)
3.	A quantitative method by utilizing simulations and modeling through ENVIMET software to analyze urban heat islands (UHI) and the effects of green surfaces, allowing for empirical comparisons of different scenarios. This structured approach to data analysis aligns with quantitative research methodologies.	(Boeri et al., 2017)
4.	The perspectives of both the public and experts regarding the reuse of post-industrial sites, indicating a qualitative approach through the exploration of subjective views and experiences. This aligns with qualitative methods in research, focusing on understanding complex social phenomena in urban redevelopment.	(Loures, 2015)
5.	The integration of architectural value in urban tourism placemaking, emphasizing qualitative methods to assess the impact of design on cityscape rejuvenation. This aligns with qualitative research methods focused on understanding perceptions and experiences in urban planning contexts.	(Abdul Rahman et al., 2018)
6.	A qualitative method by examining the interplay between state and market mechanisms in China's economic transition and urban transformation. It analyzes historical and contextual factors influencing urban development, making it suitable for qualitative research in political science and urban studies.	(Yeh et al., 2015)
7.	This qualitative analysis, illustrated through case studies, emphasizes the need for a mixed-method approach to understand the dynamics of urban development and the role of diverse stakeholders.	(Groth & Corijn, 2005)
8.	A qualitative method by analyzing urban redevelopment projects in Tokyo and New York City, focusing on trends in public space design and usage. It draws on observational data and case studies to highlight social implications and urban transformations.	(Cybriwsky, 1999)
9.	A qualitative research method, as it draws on longitudinal case studies to analyze the strategies employed by local elite actors in urban entrepreneurialism. The focus on in-depth exploration of specific public-private partnerships indicates a qualitative approach, emphasizing the nuanced understanding of social and political dynamics rather than numerical data or statistical analysis.	(Hertting et al., 2022)
10.	A qualitative approach to research by analyzing the role of play in urban design and its impact on public participation and urban transformation. The authors explore how Superblocks in Barcelona modify urban mobility and public space, indicating a focus on subjective experiences and social dynamics rather than quantitative metrics. This qualitative analysis is evident in their examination of play's contingent role in urban socialization and planning processes, emphasizing the importance of context and community engagement in urban studies.	(Amati et al., 2024),
11.	A qualitative method used in the research, focusing on children's interactions with water in urban environments. The study employs observational mapping through the TOWEC tool, which allows for detailed qualitative analysis of children's behaviors and experiences during water play. The extensive data collection of 3,399 observations over a year indicates a systematic approach to understanding these interactions, emphasizing qualitative insights into children's experiences in constructed spaces.	(Bozkurt et al., 2019)
12.	The role of public market halls in urban food systems, indicating a qualitative approach to understanding the socio-economic impacts of these markets within the context of urban regeneration. The authors analyze historical and contemporary data to illustrate how the "Barcelona model" has influenced urban transformation, which suggests a qualitative method focused on narrative and contextual analysis rather than purely numerical data.	(Fuertes & Gomez-Escoda, 2022)
13.	A qualitative approach to urban regeneration by emphasizing the analysis of cultural-tourism entrepreneurship and its impact on spatial development. The article outlines planning measures that prioritize pedestrian-friendly environments and innovative urban design, indicating a focus on subjective experiences and community engagement, which are hallmarks of qualitative research. Additionally, the study's exploration of the Albergo Diffuso concept suggests an in-depth examination of social and cultural dynamics within the urban context, further supporting its qualitative methodology.	(Antonić et al., 2024)
14.	The reference discusses the transformation of urban barrios in Santiago, Chile, utilizing a mixed-method approach. The article employs qualitative methods through literature and policy reviews, alongside quantitative analysis of morphology and land use in three specific	(Maturana et al., 2019)

No.	Method Used	Authors
	barrios. This combination allows for a comprehensive understanding of the social and economic dynamics at play, particularly in relation to urban cultural tourism and the implications of gentrification. The insights drawn from both qualitative and quantitative data facilitate a nuanced exploration of the residents' social capital versus the barrios' symbolic capital, addressing the complexities of urban development in a rapidly changing city.	

Source: Author's Analysis, 2025

A comparison of the use of methods grouped into qualitative research methods, quantitative research methods, and mix methods (qualitative and quantitative) can be seen as follows:

Table 4: Total Methods used in research

No.	Research Method	Authors	Total
1.	Qualitative method	(Loures, 2015), (Abdul Rahman et al., 2018), (Yeh et al., 2015), (Groth & Corijn, 2005), (Cybriwsky, 1999), (Hertting et al., 2022), (Amati et al., 2024), (Bozkurt et al., 2019), (Fuertes & Gomez-Escoda, 2022), (Antonić et al., 2024)	10
2.	Quantitative method	(Boeri et al., 2017)	1
3.	Mix method	(Boeri et al., 2020), (Boeri et al., 2022), (Maturana et al., 2019)	3

Source: Author's Analysis, 2025

In these 14 articles, the method used by many authors is to use qualitative methods, such as observation, direct observation, or exploration in obtaining data or phenomena in the field. This is done to directly see the transformation formed by several themes or objects observed. This could have been more interesting as the researcher conducted qualitative methods as a tool in a study. However, research using quantitative methods still seems to be lacking, even though quantitative methods are also good because they are more measurable to see the change or transformation of an urban area as done in the study of Boeri et al., (2017) by conducting a simulation. Research using a mix method that combines qualitative and quantitative methods is much better by measuring and exploring the field in seeing a transformation, especially the transformation of public open space in the city center.

3.5 Discussion

The present article explored the trend of topics discussed and future topics that need to be discussed on the big theme of "City Center of Public Open Space Transformation" from a bibliometric and conceptual analysis perspective using databases derived from Scopus and WOS (Web of Science). The initial phase of the study entailed the identification of authors who have been actively publishing articles related to the theme, as well as the most cited articles. This approach was undertaken to ascertain significant opportunities for conducting research on the theme of City Center of Public Open Space Transformation. This research looks at trends in topics that are often discussed by authors and opportunities for further research. Judging from the most productive authors, Boeri, et. Al. generally discuss between economic transition, environmental sustainability, and community engagement is critical in shaping the future of urban spaces. In research (Groth & Corijn, 2005) which is the most cited article discussing emphasis on the need for more inclusive and participatory urban governance, as it suggests that urban redevelopment should not only focus on economic efficiency but also consider the social and cultural dimensions of urban life.

The most trending research on the topic of City Center of Public Open Space Transformation is on the theme of urban planning and urban politics, the post-industrial redevelopment, economic transition, public space, and revitalization are research trends that are also widely cited in urban transformation research. All of these topics were the most cited in research by researchers until 2024. The most recent topics based on keywords in the articles are the word "Public Space" dominates, followed by the words "urban", "public open space", and other words that appear related to the topic of "City Center Open Public Space Transformation". The keywords that appear also indicate that these keywords are trending topics that are interesting to discuss. Thematic mapping has shown that interest in topics such as themes that have the opportunity to be researched are in Niche themes and Motor themes, because they have high centrality but publications are still lacking so that research on these themes needs to be developed. Niche clusters include cultural tourism, and urban regeneration, and City Center was in the motor themes. To deepen research on the topic of urban transformation, especially on open public spaces in the city center, it should be done using a mix-method, so that researchers explore more both descriptively and measurably. The physical transformation of spaces should promote social inclusion and environmental sustainability. Participatory interventions were implemented to improve public spaces, demonstrating how local stakeholders can contribute to urban regeneration efforts (Boeri et al., 2022b). Other than that, tourism in the context of open space transformation presents both opportunities and challenges. While it can drive urban regeneration and economic revitalization, it requires careful planning and community engagement to ensure that the benefits are equitably distributed and that local identities are preserved.

4. Conclusion

After looking at the results and the previous discussion, there are several things that can be concluded, including the most trending research, variations in keywords that are often used, methods that are mostly used, and further themes that need to be researched on the topic of City Center of Public Open Space Transformation. The most trending research on the topic of City Center of Public Open Space Transformation is on the theme of urban planning and urban politics. The most recent topics based on keywords in the articles are the word "Public Space" dominates, followed by the words "urban", "public open space", "urban regeneration", "urban space", and other words. The method used by many authors is to use qualitative methods, such as observation, direct observation, or exploration in obtaining data or phenomena in the field. That research on themes needs to be developed are tourism, urban regeneration, and City Center. Tourism in the context of open space transformation presents both opportunities and challenges in future research. The next research will discuss urban transformation in the city center in open public space in the development of inclusive tourism. Transformation in the field of inclusive tourism is interesting to research how much impact it has on the sustainability of a city.

References

- Abdul Rahman, N., Halim, N., & Zakariya, K. (2018). Architectural Value for Urban Tourism Placemaking to Rejuvenate the Cityscape in Johor Bahru. *IOP Conference Series: Materials Science and Engineering*, 401(1). <https://doi.org/10.1088/1757-899X/401/1/012010>
- Ahirrao, P., & Khan, S. (2021). Assessing public open spaces: A case of city nagpur, india. *Sustainability (Switzerland)*, 13(9). <https://doi.org/10.3390/su13094997>
- Amati, M., Stevens, Q., & Rueda, S. (2024). Taking Play Seriously in Urban Design: The Evolution of Barcelona's Superblocks. *Space and Culture*, 27(2), 156–171. <https://doi.org/10.1177/12063312231159229>
- Antonić, B., Stupar, A., Kovač, V., Sovilj, D., & Grujičić, A. (2024). Urban Regeneration through Cultural–Tourism Entrepreneurship Based on Albergo Diffuso Development: The Venac Historic Core in Sombor, Serbia. *Land*, 13(9), 1379. <https://doi.org/10.3390/land13091379>
- Boeri, A., Gaspari, J., Gianfrate, V., & Longo, D. (2017). Accelerating Urban transition: An approach to greening the built environment. *WIT Transactions on Ecology and the Environment*, 223, 3–14. <https://doi.org/10.2495/SC170011>
- Boeri, A., Longo, D., Orlandi, S., Roversi, R., & Turci, G. (2020). Temporary transformations to access and experience sustainable city public spaces. *WIT Transactions on Ecology and the Environment*, 249, 43–55. <https://doi.org/10.2495/SC200051>
- Boeri, A., Longo, D., Orlandi, S., Roversi, R., & Turci, G. (2022a). COMMUNITY ENGAGEMENT AND GREENING STRATEGIES AS ENABLING PRACTICES FOR INCLUSIVE AND RESILIENT CITIES. *International Journal of Environmental Impacts*, 5(1), 1–14. <https://doi.org/10.2495/EI-V5-N1-1-14>
- Boeri, A., Longo, D., Orlandi, S., Roversi, R., & Turci, G. (2022b). COMMUNITY ENGAGEMENT AND GREENING STRATEGIES AS ENABLING PRACTICES FOR INCLUSIVE AND RESILIENT CITIES. *International Journal of Environmental Impacts*, 5(1), 1–14. <https://doi.org/10.2495/EI-V5-N1-1-14>
- Borrego, M., Foster, M. J., & Froyd, J. E. (2014). Systematic Literature Reviews in Engineering Education and Other Developing Interdisciplinary Fields. *Journal of Engineering Education*, 103(1), 45–76. <https://doi.org/https://doi.org/10.1002/jee.20038>
- Bozkurt, M., Woolley, H., & Dempsey, N. (2019). Children's interactions with water in city centres: a case study from Sheffield, UK. *Landscape Research*, 44(6), 671–687. <https://doi.org/10.1080/01426397.2018.1518518>
- Carmona, M. (2019). Principles for public space design, planning to do better. *Urban Design International*, 24(1), 47–59. <https://doi.org/10.1057/s41289-018-0070-3>
- Cybrirsky, R. (1999). Changing patterns of urban public space Observations and assessments from the Tokyo and New York metropolitan areas. In *Cities* (Vol. 16, Issue 4). www.elsevier.com/locate/cities
- Dong, J., Yang, Y., Luo, M., Cheng, Q., Zhang, X., & Wang, Y. (2022). SPATIAL EQUITY OF CITY PUBLIC OPEN SPACES BASED ON G2SFCA: A CASE STUDY OF WUHAN, CHINA. *International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives*, 43(B4-2022), 501–506. <https://doi.org/10.5194/isprs-archives-XLIII-B4-2022-501-2022>
- Fuertes, P., & Gomez-Escoda, E. M. (2022). Supplying Barcelona: The Role of Public Market Halls in the Construction of the Urban Food System. *Journal of Urban History*, 48(5), 1121–1139. <https://doi.org/10.1177/0096144220971821>
- Groth, J., & Corijn, E. (2005). Reclaiming Urbanity: Indeterminate Spaces, Informal Actors and Urban Agenda Setting. *Urban Studies*, 42(3), 503–526. <https://doi.org/10.1080/00420980500035436>
- Hertting, N., Thörn, C., & Franzén, M. (2022). NORMALIZING URBAN ENTREPRENEURIALISM THROUGH SLY DE-POLITICIZATION: City Centre Development in Gothenburg and Stockholm. *International Journal of Urban and Regional Research*, 46(2), 253–268. <https://doi.org/10.1111/1468-2427.13017>
- Koçyiğit, S. Ç., Aras, İ. A., Çelik, G., & Günenç, E. Ö. (2023). BIBLIOMETRIC MAPPING OF STUDIES ON GREEN ACCOUNTING IN HEALTH. *Mehmet Akif Ersoy Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 10(2), 1627–1645. <https://doi.org/10.30798/makuiibf.1282690>

- Kowalczyk-Anioł, J. (2023). Rethinking tourism-driven urban transformation and social tourism impact: A scenario from a CEE city. *Cities*, 134. <https://doi.org/10.1016/j.cities.2022.104178>
- Loures, L. (2015). Post-industrial landscapes as drivers for urban redevelopment: Public versus expert perspectives towards the benefits and barriers of the reuse of post-industrial sites in urban areas. *Habitat International*, 45(P2), 72–81. <https://doi.org/10.1016/j.habitatint.2014.06.028>
- Maturana, B., Mcinney, A., & Bravo, M. (2019). *Urban Transformations in the Culture of Santiago* (Vol. 44, Issue 4).
- Mutaw, S. K. A., & Asfour, O. S. (2022). Open Public Spaces: What Makes Them Successful? *SPACE International Journal of Conference Proceedings*, 2(2), 1–5. <https://doi.org/10.51596/sijocp.v2i2.47>
- Roth, C., Kang, S. M., Batty, M., & Barthélemy, M. (2011). Structure of urban movements: Polycentric activity and entangled hierarchical flows. *PLoS ONE*, 6(1). <https://doi.org/10.1371/journal.pone.0015923>
- Schima, R., Paschen, M., Dietrich, P., Bumberger, J., & Goblirsch, T. (2019). City of the future: Urban monitoring based on smart sensors and open technologies. *SENSORNETS 2019 - Proceedings of the 8th International Conference on Sensor Networks*, 116–120. <https://doi.org/10.5220/0007484501160120>
- Schuur, J. S., Switalski, M., Salliou, N., & Grêt-Regamey, A. (2024). Identifying levers of urban neighbourhood transformation using serious games. *Npj Urban Sustainability*, 4(1). <https://doi.org/10.1038/s42949-023-00138-5>
- Sun, Y., Fan, H., Li, M., & Zipf, A. (2016). Identifying the city center using human travel flows generated from location-based social networking data. *Environment and Planning B: Planning and Design*, 43(3), 480–498. <https://doi.org/10.1177/0265813515617642>
- Thombre, L., & Kapshe, C. (2022). Verification of Connection Between Legibility and Conviviality of Public Open Spaces- A Case of New Market, Bhopal. *Ecology, Environment and Conservation*, 219–226. <https://doi.org/10.53550/eec.2022.v28i01.029>
- Tsekeris, T., & Geroliminis, N. (2013). City size, network structure and traffic congestion. *Journal of Urban Economics*, 76(1), 1–14. <https://doi.org/10.1016/j.jue.2013.01.002>
- Turk, N. (2021). Methodology of systematic reviews. *Zdravniški Vestnik*, 90(7–8), 432–442. <https://doi.org/10.6016/ZdravVestn.3138>
- Yeh, A. G. O., Yang, F. F., & Wang, J. (2015). Economic transition and urban transformation of China: The interplay of the state and the market. *Urban Studies*, 52(15), 2822–2848. <https://doi.org/10.1177/0042098015597110>
- Zhidebekkyzy, A., Kalmakova, D., & Kotaskova, A. (2024). Responsible Production: A Systematic Review and Future Research Directions. *Eurasian Journal of Economic and Business Studies*, 68(2), 50–73. <https://doi.org/10.47703/ejeb.v68i2.380>