

## A Bibliometric Analysis on the Relationship Between Migration and Urban Design

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### Abstract

This study examines how migration is addressed in the field of urbanism and, in particular, urban design. Migration, which significantly affects space and social life in today's cities, is often discussed in the literature through policy and regional/urban scale studies, while its relationship with urban design remains limited. Urban design decisions can influence migrants' lives, either reinforcing or overcoming social divisions. Using bibliometric analysis, this study explores how the migration-urban design relationship is shaped and identifies literature gaps. Data were collected from Scopus, ULAKBIM TR Dizin, and DergiPark databases. Findings show that migration is mainly associated with topics like housing, urbanization, gentrification, and segregation, while concepts like integration and cultural adaptation remain underexplored. The results aim to guide future research in this field.

**Keywords:** migration, urban design, city planning

### 1. Introduction

Migration, as a fundamental phenomenon that transforms social, economic and spatial dynamics throughout history, has been on the research agenda of different disciplines. However, academic studies on this multi-layered phenomenon have mostly been shaped from the perspectives of sociology, economics and political science, while spatial planning and design disciplines have been relatively limited. However, migration is not only the physical relocation of individuals, but also a complex process that has direct effects on the production, use and remodelling of urban space.

This study aims to analyse how the issue of migration is handled in the context of urbanism and especially urban design, both in the world in general and in Turkey in particular, on the basis of conceptual relations. In this context, it is aimed to reveal the prominent themes, trends and gaps in the production of knowledge on migration. Within the scope of the research, migration is analysed in relation to the concepts of urbanism and urban design, and how these relations are established in the existing literature is questioned.

Methodologically, bibliometric analysis method is used in the study in order to evaluate the relationship between migration and research topics in the field of urban design. Thus, both how migration is represented in literature and the conceptual links established with the discipline of urban design will be analysed systematically. This analysis aims to contribute to identifying the limits of spatially based academic production on migration and to shed light on the gaps in knowledge in this field.

### 2. Conceptual Framework

#### 2.1. Migration

Migration refers to the movement of people across a state border or within a country. These movements are defined as population movements based on the displacement of people, regardless of their duration, nature or cause (Perruchoud & Cross). The migration process often causes social, environmental, economic and political transformations and has an impact on both the sending and receiving societies. In today's globalised world, it is seen that migration phenomenon emerges as a result of social and economic development. In this context, migration can contribute to the improvement of economic and social conditions, but it can also pave the way for the formation of various inequalities (Castles, De Haas, & Miller, 2014).

According to Tekeli (2006), migration is a social process that enables settlement systems to adapt to changing conditions. Factors such as transformations in the political and economic external relations of the society or economic inequalities at regional level require the settlement structure to adapt to new conditions. When this adaptation is not achieved, disadvantaged social groups emerge within the city and significant segregation is

experienced in the urban fabric. This incompatibility can be shaped depending on factors such as income level, class structure, ethnic and religious characteristics of the society (Tekeli, 2006). One of the main causes of socio-spatial segregation is large-scale migration movements and race-based discrimination. These large-scale urban migrations experienced in certain periods lead to polarisation in the labour market and increase in injustice in income distribution. With migration and the factors that trigger this process, the boundaries of spatial segregation become more apparent (Erder, 1997). With large-scale migration processes, the socio-spatial segregation of migrants is accompanied by social exclusion and racial discrimination. With the globalisation process, there has been a concentration at the upper and lower ends of occupational fields; the weakening of the middle class has increased occupational polarisation and deepened discrimination against migrants (Fahey & Fanning, 2010).

Migration management is considered as a process that is mostly under the jurisdiction of central governments around the world. The global increase in migration movements in recent years has been defined as a 'migration crisis' by many governments. Looking at this process from a perspective based on 'crisis management' and centralised decision-making structures, migration management poses various challenges for different social groups. According to the 2020 World Migration Report of the International Organisation for Migration (IOM), there are currently around 272 million international migrants, accounting for approximately 3.5% of the world population (IOM, 2020). Accordingly, migration management has become an increasingly critical issue in the context of a significant mass of people (Çevik, 2021). Migration, in its most general definition as human mobility, has the power to change and shape the destiny of cities as well as nations.

In line with this general framework, we will now proceed to examine how migration intersects with urban design and with which conceptual approaches this relationship is addressed in the literature.

## 2.2. Migration and Urban Design Relationship

While the structural characteristics of urban space shape society, society also produces new spatial organisations. In this process, inequalities emerging in social relations are reflected in space; similarly, inequalities produced at the spatial level have an impact on social relations (Lefebvre, 1974).

In this framework, the reflections of the phenomenon of migration on urban space in Turkey constitute an important area of investigation. Turkey has faced intense migration movements since the mid-20th century. Considering the urbanisation process in Turkey, Kiray states that the urban structure is shaped in line with both the socio-economic development process and the class structure. In particular, gecekondu areas, which were formed as a result of the inability of the population migrating from rural areas to the city to settle in the city, constituted a clear example of spatial segregation (Kiray, 1998).

The relationship between urban design and migration has a complex and multidimensional structure. Migration movements are effective in many areas from the physical structure of cities to social dynamics. In this process, the effects of migration on the urban structure bring about the formation of cultural diversity and new identities in the urban space, while bringing integration and social cohesion processes to the agenda. Housing and zoning policies need to respond to the changing needs arising from migration; at the same time, it necessitates the development of new approaches in line with environmental and sustainable urban development principles. An effective urban design approach can contribute to the formation of sustainable and livable cities by producing a balanced solution between the challenges and opportunities brought by migration (LeGates and Stout, 2020).

In line with this conceptual framework, examples that concretise the relationship between migration and urban design through the impact of spatial transformations on social structure are noteworthy. In this context, the 'Comuna 13' project in Medellín, Colombia offers a meaningful example of implementation. Within the scope of the project, the effective use of urban art in public spaces, increasing the level of accessibility and supporting social integration were aimed. These interventions aimed to improve the living conditions of socio-economically disadvantaged communities, strengthen social cohesion and reduce security problems. The Comuna 13 example

is important in terms of demonstrating the potential of urban design to transform social segregation shaped by migration and to promote social interaction and integration through space. (Comunaproject.org, n.d.) (Dorene, 2022)



**Figure 1:** Images of the Columbia 13 project (taken from Dorene, 2022)

As can be seen from the example cited, urban design has an important role in the spatial and social transformations that emerge with migration. Spatial arrangements shape not only the physical environment but also the forms of social interaction and the inclusiveness of urban life. In this context, it is clear that urban design decisions can directly affect the living conditions of migrants, reinforce spatial segregation and social divisions, or transform these processes to create a more inclusive urban environment. Therefore, the need to take into account the phenomenon of migration and the needs of migrants in urban design processes stands out as an important conceptual and practical requirement (Tuohy and Talen, 2017).

In this respect, it is clear that the phenomenon of migration should be addressed in a more holistic and inclusive manner in urban design processes. In the remainder of the study, the methodology and analysis process applied in order to analyse these relationships in more depth on the basis of the literature will be explained in detail.

### 3.Method

In this research, bibliometric analysis method was used to understand the reflections of migration on urbanism and especially urban design. This method enables the quantitative analysis of academic publications produced by individuals or institutions within a specific discipline, in a specific time period and in a specific geography, and the relationships between these publications (Arslan, 2022) (India, 2024). In this context, the analysis aims to reveal the dimensions of the concept of migration in the literature and the place it occupies in the context of urbanism and urban design.

Within the scope of the analysis, not only the concept of migration, but also the prominent themes, trends and conceptual frameworks in the literature related to this concept have been evaluated. In particular, the extent to which social and spatial issues directly related to migration, such as integration, have found a place in the urbanism and urban design literature has been examined; thus, priorities and gaps in the literature have been tried to be revealed.

#### 3.1. Bibliometric Analysis Process

While creating the bibliometric data set within the scope of the research, leading academic databases such as Scopus, ULAKBIM TR Index and DergiPark were used. These databases were preferred in order to search the national and international literature published in the fields of migration, urbanism and urban design in a comprehensive manner. During the data collection process, academic publications published using the relevant keywords were selected and exported in a format suitable for analysis.

VOSviewer software was used to visualise the data obtained during the bibliometric analysis process and to reveal the relationships between the subject clusters. Through the programme, keyword matches, conceptual concentrations and thematic distributions were presented as word networks and maps. In addition, word clouds were created in line with the results obtained, and visual traceability of the prominent themes related to the subject of migration in the literature was provided.

Thanks to this method, it has been systematically revealed with which concepts the issue of migration has been handled in the context of urbanism and urban design both in Turkey and internationally, and which themes have come to the fore.

### 3.2. Bibliometric Analysis Findings

#### *Scopus Database Findings*

In the bibliometric search conducted using the Scopus database, a total of 377,216 publications were found as a result of a general search with the keyword 'migration'. These publications point to a very large body of literature dealing with migration in various aspects. However, when the search scope is narrowed down with the concept of 'urban studies', the number of relevant publications decreases to 24,898. This decrease shows that the treatment of migration in the context of urban studies is relatively limited. When the term 'urban design' is added to the search, the number of publications is only 1,627. This result reveals that the subject of migration has been the subject of very few studies in urbanism, especially within the framework of urban design.

When a geographical limitation centred on Turkey was added to the filtering process, only 25 publications were found in this conceptual intersection. This situation clearly shows that the number of academic publications addressing the relationship between migration, urbanism and urban design together in the Turkish context is extremely limited.

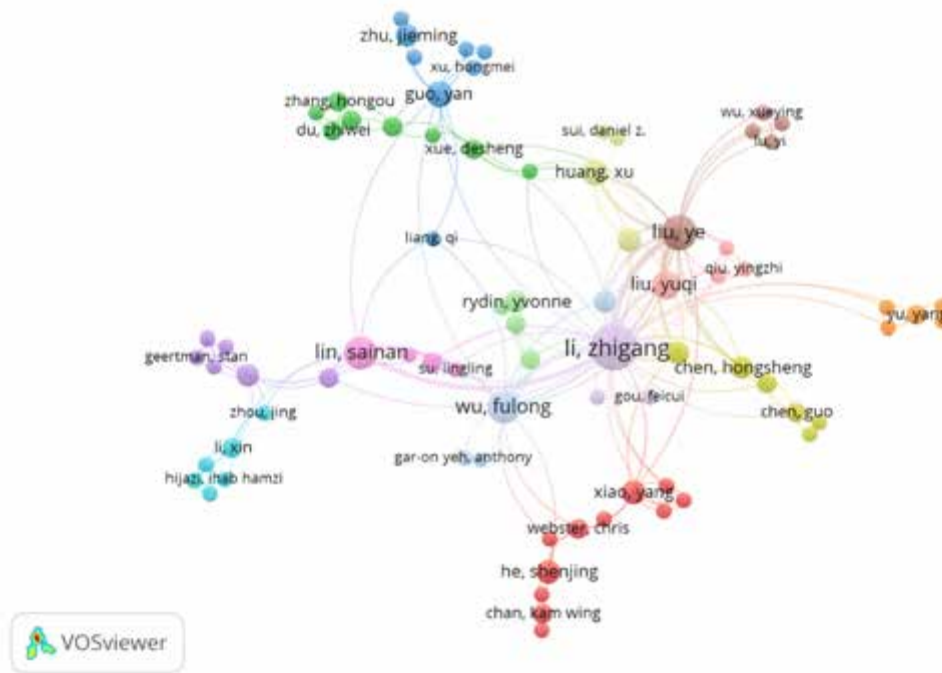
**Table 1:** scopus database data

| Used filters     | Number of publications |
|------------------|------------------------|
| "migration"      | 377.216                |
| +"urban studies" | 24.898                 |
| +"urban design"  | 1.627                  |

The network map shown in Figure 2 was created based on the publications obtained as a result of the search in the Scopus database with the keywords 'migration' and 'urban design' and visualised using VOSviewer software with bibliometric analysis method. The visualisation reveals which concepts are associated with migration and urban design in the literature, the density of the relations between them and the conceptual clusters. Each node in the visual represents a specific keyword, and the links between nodes represent the frequency of these concepts being used together in the same publication. The size of the nodes reflects the frequency of repetition of the keyword in the analysed publications, while clusters with the same colour indicate thematic groups that are located within close meaning areas.

The fact that concepts such as 'urban planning', 'urbanisation', 'housing', 'urban development' and 'urban design' are at the centre and with dense connections shows that the subject of migration is generally studied in the context of urban design by associating it with these titles. Concepts such as 'integration', 'segregation', 'gentrification', 'accessibility' and 'neighbourhood', on the other hand, highlight the effects of migration on social space with their social context. On the other hand, it is observed that concepts such as 'migrant', 'gated communities', 'exclusion' and 'place attachment' are positioned in relatively lower groups. This situation suggests that there are special areas where studies on the spatial experiences and belonging relations of migrant individuals are



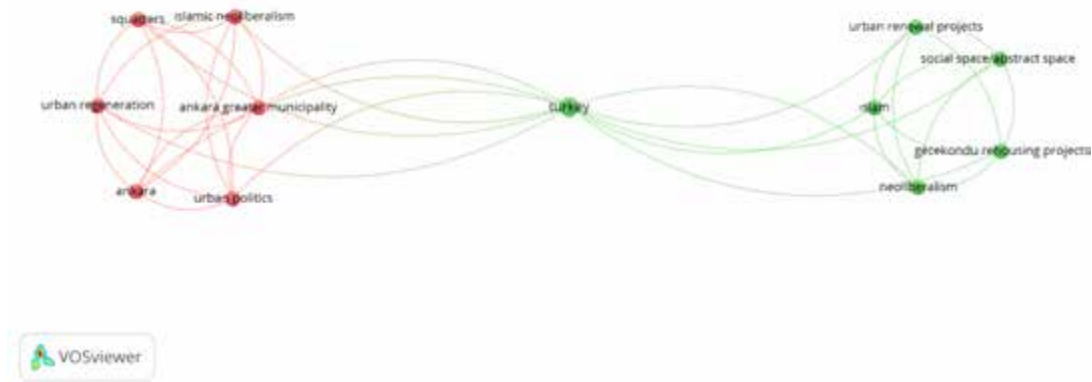


**Figure 3:** Author-citation analysis using the Scopus database

Figure 4 visualises the keyword network of publications produced in Turkey. This analysis is based on the results obtained by filtering the keywords 'migration' and 'urban design' in the Scopus database. The clusters that stand out in the visualisation provide important clues about the conceptual frameworks and themes around which the relationship between migration and urban design is shaped in the literature.

As a result of the analysis, it is seen that on the one hand, concepts such as 'urban regeneration', 'urban politics', 'Ankara', 'squatters' and 'Islamic neoliberalism' cluster together; on the other hand, concepts such as 'urban renewal projects', 'squatter rehousing projects', 'social space/abstract space', 'neoliberalism' and 'Islam' form a second cluster. This structure shows that migration is strongly associated with urban regeneration policies, slum areas, neoliberal urban policies and social spatial production processes in Turkey. The analysis also reveals that academic production on the relationship between migration and urban design is largely discussed through urban regeneration practices and the socio-spatial effects created by these practices.

These findings support that the interactions between migration, spatial change and social structure, emphasised in the previous sections, are intensified in the Turkish context, especially in urban regeneration and spatial policy debates.



**Figure 4:** Keyword analysis of publications produced in Turkey using Scopus database

Figure 5 visualises the author-citation analysis of publications produced in Turkey. This analysis is based on the results obtained by using the keywords 'migration' and 'urban design' in the Scopus database. The visual represents the citation relationships and interaction networks of the authors producing in this field within the literature.

As a result of the analysis, it is seen that certain authors are cited more intensively and stand out in the field. Names such as 'Taşan-Kok, Tuna', 'Eraydın, Ayda', 'Batuman, Bülent', 'Paköz, Muhammed Ziya' and 'Baycan-Levent, Tüzin' are among the notable authors in the literature in this field. The relatively scattered distribution of the authors shows that academic studies on the intersection of migration and urban design have not yet formed a distinct and strong research network. This situation also reveals that this topic is an emerging research area in the literature and needs more interdisciplinary cooperation and deepening. This finding also supports the assessments highlighted in the previous sections that point to gaps in the literature and lack of conceptual coherence.



**Figure 5:** Author-citation analysis of publications produced in Turkey using Scopus database

The results of the analysis from the Scopus database show that the concept of migration is predominantly addressed within the framework of themes such as 'gated communities' and 'spatial segregation in settlements' in the international literature. However, it is also associated with the concept of 'integration', albeit at a more limited level. In the Turkish context, it is noteworthy that studies on the relationship between migration and urban design are limited to a narrower range of topics and that this relationship has not yet been sufficiently deepened in the literature.

#### ULAKBIM TR Index Database Findings

ULAKBIM TR Index is an important national database that compiles and makes available academic and scientific studies carried out in Turkey. In this study, the TR Index database was used to filter the abstracts of the publications through certain keywords. As a result of the analysis, it has been determined that studies on migration and urban context show an increasing trend over the years. While an increase in the number of publications has been observed especially since the 2000s, it is seen that this increase has accelerated significantly in the last five years. It was determined that the highest number of publications was reached in 2021 and a total of 411 publications were recorded in this year.

According to the filtering results, 3,624 publications were identified with the keyword 'migration'. If this number is used with the concept of 'city', the number of publications decreases to 236. When concepts that narrow the filtering are added, 5 publications were identified with 'urbanism', 1 with 'urban planning', 2 with 'urban planning' and only 1 with 'urban design' (see Table 2). This finding shows that academic studies produced at the intersection of migration and urban design are quite limited in the Turkish context.

**Table 2:** Ulakbim TR dizin database data

| Used filters         | Number of publications |
|----------------------|------------------------|
| "migration"          | 3.624                  |
| + "urban"            | 236                    |
| / + "urbanism"       | 5                      |
| / + "city planning"  | 1                      |
| / + "urban planning" | 2                      |
| / + "urban design"   | 1                      |

In the data set obtained, the scans were evaluated in a more qualified and detailed manner due to the lack of sufficient number of publications on the intersection of migration and urban design. In this framework, the results are visualised and presented through word clouds in order to reveal conceptual trends and thematic relationships more clearly. In Figure 6, the word cloud reflecting the main study topics obtained as a result of the analyses made in the ULAKBIM TR Index database is visualised. When the prominent key concepts in the image are examined, it is seen that the concept of 'migration' has a central position. In addition, concepts such as 'belonging', urban sociology', 'urbanisation process', 'cultural adaptation' and 'transformation processes', which emphasise social and spatial dimensions, also draw attention. In addition, elements that point to more specific contexts such as 'urban architecture', administrative structure' and 'Hatay' as a place name also come to the fore.

This structure shows that the migration phenomenon is mainly addressed in the literature in Turkey in relation to social belonging, cultural adaptation and urbanisation processes, and that it is still a limited but potentially developing research area in the spatial context.



**Figure 6:** Ulakbim TR index database word cloud

#### **DergiPark Database Findings**

DergiPark is a comprehensive database that brings together scientific studies published in Turkish academic journals and provides open access to them in a digital environment. In this study, a search was conducted using keywords identified in the abstract sections of publications in the DergiPark database.

The data obtained from the analysis are presented in Figure 7. According to this analysis, 6,507 publications were identified using the keyword 'migration'. When the keyword 'urbanism' was used alongside 'migration', this number dropped to 10 publications, while three publications were identified with 'urban planning' and five with 'urban design' (see Table 3).

**Table 3:** Dergipark database data

| Used filters         | Number of publications |
|----------------------|------------------------|
| "migration"          | 6.507                  |
| + "urbanism"         | 10                     |
| / + "urban planning" | 3                      |
| / + "urban design"   | 5                      |

These results suggest that migration is a significant topic in general literature, but research addressing it in the context of urban planning and design is limited. Consistent with previous database analyses, the findings once again highlight that the relationship between migration and urban design in Turkey is a topic that has not yet been sufficiently explored in academia.

Figure 7 shows a word cloud visualisation of the key concepts obtained from the DergiPark database analysis. Due to the limited amount of data available, the word cloud method was used to highlight conceptual trends and demonstrate which themes stand out in the literature more clearly. Key concepts that stand out in the visualisation include 'urban design', 'heritage area', 'urban open space', 'urban area adequacy', 'urban landscape', and 'Diyarbakır', which refer to spatial and local contexts. Themes such as 'socio-spatial approach', interdisciplinary approach', ecological design' and 'user preferences' also hold a significant place in the literature.



**Figure 7:** DergiPark database word cloud

This structure reveals that the DergiPark database addresses the topics of migration and urban design, particularly in terms of spatial quality, the protection of heritage areas and urban open spaces. However, studies focusing directly on the context of migration are limited in number.

The DergiPark database analysis shows that the topic of 'migration' generally reflects the current state and social dynamics of contemporary cities. It is also noteworthy that publications produced in Turkey within the scope of urban design largely address the themes of 'housing', 'urban transformation', and 'informal settlements'. Consistent with previous database analyses, these findings indicate that academic studies on the relationship between migration and urban design remain limited in scope, highlighting the need for further in-depth research in this area.

In this context, trends in the literature and research gaps have been identified based on the findings of the analysis. The conclusions drawn from these findings will be evaluated in detail in the final section.

#### 4. Conclusion

The analyses conducted aimed to reveal how the relationship between migration and urban design is addressed in the literature at a conceptual level. Within the framework of the stated objectives, themes related to migration in urban planning and urban design were evaluated and gaps in the existing literature were identified.

The analysis results showed that academic publications related to migration increased in the 2000s, with this trend accelerating significantly in the last five years. This trend indicates the growing importance of the issue in the context of current urban dynamics and social changes. Findings show that migration is predominantly addressed in international literature in terms of spatial segregation themes such as "closed communities" and "segregation in settlements". However, it has also been observed that it is associated with the concept of "integration", albeit to a lesser extent. A similar pattern emerges in the context of publications produced in Turkey: migration is primarily addressed in relation to "urban transformation", "slum formation" and "housing", while studies addressing concepts such as "adaptation" and "cultural integration" are quite limited.

Overall, it can be concluded that the relationship between migration and urban design remains limited in the literature, highlighting the need for more comprehensive, interdisciplinary, and inclusive research in this field. In particular, considering urban design as a tool that supports 'integration' and 'adaptation' processes, and discussing these issues through public spaces, could be an important direction for future research.

These findings provide concrete evidence of the gap in the literature that motivated this study. Notably, the dearth of studies examining migration from an urban design perspective underscores the necessity for more comprehensive research on this subject.

The limitation of the study is that only the Scopus, TR Dizin and DergiPark databases were used in the bibliometric analysis. This has limited the scope of the analysed publication set. Nevertheless, the analyses provide valuable insights into trends and research gaps in the existing literature.

In conclusion, this study emphasises the need for more comprehensive and diverse research at the intersection of migration and urban design, particularly the importance of incorporating social cohesion, integration and public space perspectives into urban design processes.

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