REVIEW

by Assoc. Prof. Tsveta Zhekova, PhD, Arch., Department of Architecture and Urban Studies, Faculty of Architecture, Varna Free University "Chernorizets Hrabar", Chair of the Scientific Jury

SUBJECT: Doctoral dissertation for the award of the educational and scientific degree "Doctor" (PhD)

Title: "The Effects of the Urban Transformation on the Perception of Security"

Doctoral candidate: Seyyid Muhammed Maruf Zortul, independent (self-study) doctoral candidate

Field of higher education: 5. Technical Sciences; **Professional field:** 5.7. Architecture, Construction and Geodesy; **Scientific specialty / Doctoral program:** "Territorial, Landscape and Urban Planning"

Scientific supervisor: Assoc. Prof. Plamen Petrov, PhD, Arch.

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This review has been prepared on the basis of Order No. 601 of 29.09.2026 of the Rector of Varna Free University "Chernorizets Hrabar" on the composition of the Scientific Jury, and of the decision taken at its first meeting. Its purpose is to assess the submitted dissertation for public defence before the Scientific Jury. It complies with the Development of the Academic Staff in the Republic of Bulgaria Act, its Implementing Regulations and the internal regulations of Varna Free University "Chernorizets Hrabar".

The materials submitted are:

– the dissertation, in English;
– the abstract (avtoreferat), in Bulgarian;
– a list of publications on the dissertation topic.

1. GENERAL CHARACTERISTICS OF THE DISSERTATION

The dissertation is written in English and comprises 162 pages. It consists of an introduction, a main body in three chapters, conclusions and recommendations, a list of references and four appendices (4 pages). The introduction forms **Chapter 1**, and the

conclusions and recommendations form Chapter 5. The recommendations follow two lines: towards urban planning practice and public authorities, and towards future research. The main text contains 25 tables and 33 figures. The list of references includes 134 titles in English and Turkish.

The structure is logical and follows the accepted model for empirical research. The argument proceeds from the general concepts of the city, urbanization and urban transformation to a specific case study – the urban transformation project of the Fikirtepe neighbourhood in the Kadıköy district of Istanbul. The research then moves on to a single field questionnaire survey of 131 respondents and the interpretation of its results.

Chapter 1 presents the introductory part of the dissertation, setting out the relevance of the topic; the research problem; the object and subject; the aims and tasks; the hypotheses; the methodological approach; the scientific novelty and the structure of the research.

Chapter 2 examines the conceptual framework of urban transformation and its methods. It traces the historical and regulatory development of the process in Turkey from 1923 to the present. It analyses its five dimensions: physical, environmental, social, economic and legal-administrative. It explores and presents the concept of the perception of security. The planning, legal and institutional history of the Fikirtepe project in the period 2005–2021 is traced in detail. The chapter concludes by identifying gaps and unresolved issues in the existing scientific literature.

Chapter 3 describes the research methodology, which follows a clear logical sequence. The research is quantitative and based on a correlational model. The target group comprises the adult residents of Fikirtepe, and the sample includes 131 voluntary participants. Data were collected through a face-to-face field questionnaire with a demographic form and three five-point Likert-type scales. Each respondent assesses three things: the existing condition of the Fikirtepe neighbourhood, the existing condition of the Kadıköy district in which the neighbourhood is located, and the expected outcome of the transformation of the same neighbourhood. The three assessments are compared with one another for the same respondents. Data processing begins with a check of the reliability and normality of the data. This is followed by comparisons by demographic characteristics, a comparison of the three scales and an analysis of the relationships between demographic groups and assessments. The chapter ends with the assumptions and limitations of the research.

Chapter 4 presents the empirical research and data analysis. It includes descriptive statistics such as frequency distributions, means and standard deviations. These are used to organize, summarize and visually present the data and the characteristics of the specific sample –

its structure and the scores on the three scales. In addition, the chapter includes tests for differences by demographic characteristics. It also includes the Friedman test for comparing the three scales. This non-parametric test is used to check whether the assessments of the same respondents for Fikirtepe, Kadıköy and the transformation project differ significantly. Spearman's rank correlation is applied to the relationships of education, income and length of residence with the assessments, as well as the chi-square test of independence for the same characteristics. The chapter concludes with a detailed interpretation of the results of the empirical research.

Chapter 5 summarizes the main results and tests the research hypotheses. The main hypothesis assumes that the demographic characteristics of residents influence their perception of security and of the spatial environment. It is tested through sub-hypotheses for the individual variables: the sub-hypothesis on gender is fully rejected; those on age, monthly income and education are confirmed; and the one on length of residence is partially confirmed – for the assessment of the existing condition, but not for the assessment of the transformation project. The chapter formulates theoretical and practical conclusions from the results and offers recommendations for design practice in the field of urban planning, as well as for future research.

Overall, the dissertation contains an extensive theoretical part that provides a broad context for the empirical research. The volume and structure of the work are also fully in line with the requirements for a doctoral dissertation.

2. RELEVANCE OF THE PROBLEM. OBJECT, SUBJECT, AIM, TASKS AND HYPOTHESIS

The topic is relevant and significant for urban planning theory and practice. In Turkey, seismic risk is used as the main argument for the large-scale replacement of the building stock. This has been the case especially since the 1999 Marmara earthquake and the adoption of Law No. 6306 on the Transformation of Areas under Disaster Risk. These processes are reshaping the living environment of a large part of the urban population. The attitudes of the residents themselves have been studied considerably less than the legal, economic and physical aspects of the process.

The object of the research is the process of urban transformation and its socio-spatial dynamics. The territorial scope covers the Fikirtepe neighbourhood and the Kadıköy district, Istanbul. **The subject** of the research is the impact of this process on residents' perception of

security. The subject covers physical safety, the social environment, infrastructural adequacy and seismic resilience. The object and the subject are correctly distinguished.

The choice of Fikirtepe as the **territorial scope** of the research is well justified. It is one of the largest and most contested urban transformation projects in Istanbul. The process there has been ongoing for more than a decade. This makes it possible to study attitudes while the change is still under way. The issues addressed are also relevant beyond Turkey, including for the renewal of large-scale prefabricated housing estates in Bulgaria.

The aim is to establish the influence of urban transformation on the perception of security, and to examine whether this relationship varies with demographic characteristics. To achieve the aim, four consecutive tasks are set:

1. to determine the perceived level of provision of the Fikirtepe neighbourhood and the Kadıköy district against ten urban planning indicators: security; educational, health and religious buildings (social infrastructure); parking, traffic and transport, streets and pavements (transport infrastructure); green spaces and parks; technical infrastructure; seismic resistance of buildings;
2. to determine the level of security, resilience and environmental quality that residents expect from the urban transformation project;
3. to establish whether these assessments differ by gender, age, marital status, education, income and length of residence;
4. to interpret the differences identified through the concepts of spatial injustice, place attachment and elite districts.

The tasks are logically linked to the aim and correspond to the structure of the empirical research. The general hypothesis assumes statistically significant differences in perceptions according to demographic variables. In the abstract it is specified through five sub-hypotheses, which are statistically testable. The dissertation would benefit if the sub-hypotheses were formulated at the outset with an expected outcome and subsequently given a theoretical justification.

3. RESEARCH APPROACH AND METHODS. SUMMARY OF THE MAIN RESULTS

The research methodology involves a quantitative analysis of data from a face-to-face field questionnaire with 131 participants. Its most valuable methodological feature is the within-subject comparison. Each respondent assesses the existing condition of the neighbourhood, of the wider district, and the expected condition after the transformation. In this way, the gap

between the existing condition and the expected outcome is measured for one and the same person.

The internal consistency of the scales was tested with Cronbach's alpha (0.905–0.920). The choice between parametric and non-parametric tests is justified by normality tests. A wide range of methods has been applied:

- independent samples t-test and one-way analysis of variance (ANOVA);
- Friedman test with Dunn's multiple comparisons;
- Spearman's rank correlation;
- chi-square test of independence.

The results are presented clearly in tables and graphs. This demonstrates the candidate's sound training in applied statistics.

The main results are clear and convincing:

- **The assessments follow a consistent order.** Fikirtepe is rated lowest, Kadıköy occupies an intermediate position, and the expected outcome of the transformation project is rated highest. This pattern is observed both for security and for most urban planning indicators.
- **Seismic risk is the main argument in favour of the transformation.** The seismic resistance of buildings in Fikirtepe and in Kadıköy is rated equally low, while that of the project is rated highest.
- **Income is associated with the assessments of infrastructure provision and seismic safety.** The association is moderate and is observed both in the assessment of the existing condition and in the expected outcome of the project.
- **Differences between demographic groups decrease in the assessment of the transformation project.** This applies mainly to groups with different levels of education and different lengths of residence, and only for some indicators. The candidate's interpretation draws on the concept of the hegemonic spatial fix and on the concept of elite localities.

The research relates its results to recent Turkish literature on the urban development of Istanbul. This shows that the author is familiar with current issues in the field. In future development of the topic, I would recommend that the conclusions on gated communities, place attachment and population mobility be supported by direct measurement – for example, with validated scales and with a survey of residents who have left the neighbourhood.

4. SCIENTIFIC-THEORETICAL AND SCIENTIFIC-APPLIED CONTRIBUTIONS

The candidate formulates **scientific-theoretical, scientific-applied and applied** contributions that correspond to the nature of the research results:

Scientific-theoretical contributions

1. An interpretative conceptual framework of "urban fatigue" is proposed. It describes the cumulative effect of prolonged uncertainty and the lack of adequate services and infrastructure on attitudes towards urban transformation. The first empirical evidence in its support has been obtained, namely the lowest scores given by residents with a medium length of residence.
2. Weak to moderate relationships between socio-economic status and the assessment of infrastructure provision and seismic safety have been established. This is a quantitative confirmation of the theses on socio-spatial inequality in urban transformation mega-projects. The contribution is of a confirmatory nature.

Scientific-applied and applied contributions

3. A comparative three-level approach has been proposed and tested. It is used by the same respondents to assess the existing condition of the neighbourhood, of the surrounding district and the transformation project. The approach can be refined by harmonizing the statements in the three scales. It is applicable to other areas where transformation has been announced but not completed.
4. The planning, legal and institutional chronology of the Fikirtepe urban transformation project for the period 2005–2021 has been summarized and systematized. This is a useful source for comparative research.
5. Recommendations to planning authorities and administrations have been formulated. They concern resident participation, transparent information on the seismic resistance requirements for buildings, and the balanced provision of social and technical infrastructure.

The contributions are the candidate's own work and fall within the field of the doctoral program. Overall, the dissertation enriches urban planning theory and practice with the established relationships between the demographic characteristics of residents and their assessments, and makes it possible to apply the methodology described beyond Turkey as well.

5. ASSESSMENT OF THE PUBLICATIONS AND THE ABSTRACT

Five publications on the dissertation topic from the period 2023–2026 have been submitted. All five are in English and co-authored with the scientific supervisor. The candidate is the first author of all of them. The publications are as follows:

- three papers at international scientific conferences in Sofia, Konya and Varna;
- an article in the journal "Engineering Sciences" of the Bulgarian Academy of Sciences;
- an article in the electronic journal of Varna Free University "Chernorizets Hrabar".

The publications reflect the main results of the research and have been presented to the scientific community. Their presentation at various forums reflects the natural development of the topic during the doctoral studies.

The abstract comprises 50 pages and has been prepared in accordance with the requirements. It reflects the structure and main results of the dissertation. As a synthesized presentation of the dissertation, it refines the formulation of the hypotheses, limitations and recommendations.

6. REMARKS AND RECOMMENDATIONS

The remarks are aimed mainly at the candidate's future work and at the publication of the results.

1. **Analysis of additional factors.** In future work it is advisable to analyse also the factors that were not measured directly in the present research: gated communities, place attachment and population mobility. For this purpose, validated scales for perceived safety and place attachment could be developed. The research could also include residents who have left the neighbourhood.
2. **Statistical analysis and interpretation.** Before publication, I recommend that the statistical results be carefully checked, as some of the reported values do not correspond to the descriptive data presented. Results for very small subgroups would be better presented descriptively. The three scales use different response formats, and this should be taken into account when comparing mean values. Since the survey is cross-sectional, conclusions about cause-and-effect relationships should be formulated more cautiously.
3. **Scope of future research.** Should the topic be developed further, I recommend extending the time frame of the research to take into account the February 2023

earthquakes and their influence on the perception of seismic risk. At the author's discretion, the thematic scope could also be extended in the field of the perception of security, which is central to the dissertation. Engaging with the classic concepts of "defensible space" (O. Newman), "eyes on the street" (J. Jacobs) and crime prevention through environmental design (CPTED, C. R. Jeffery) would considerably enrich the work.

7. CONCLUSION

The dissertation of Seyyid Muhammed Maruf Zortul addresses a relevant problem of contemporary urban planning: residents' perception of security and quality of living after large-scale urban transformation aimed at ensuring seismic resilience. The work contains original empirical research, in which the candidate has applied a diverse set of statistical methods and interpreted the results in the context of current scientific literature. This shows that he is able to formulate a research problem, organize field research and draw conclusions of practical value.

The remarks and recommendations do not call into question the value of the work. They outline directions for its future development and publication.

The dissertation, the abstract and the publications meet the requirements of the Development of the Academic Staff in the Republic of Bulgaria Act (State Gazette No. 38 of 21.05.2010, as amended and supplemented), its Implementing Regulations and the internal regulations of Varna Free University "Chernorizets Hrabar".

On the basis of the above, I give a **positive assessment** of the dissertation. I propose that the esteemed Scientific Jury award **Seyyid Muhammed Maruf Zortul** the educational and scientific degree **"Doctor" (PhD)** in Field of higher education 5. "Technical Sciences", Professional field 5.7. "Architecture, Construction and Geodesy", Scientific specialty (Doctoral program) "Territorial, Landscape and Urban Planning".

Date: 10.11.2026
Varna

Reviewer: 

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