

FIG. 1 COMPARATIVE ASSESSMENT OF THE RESIDENTIAL ENVIRONMENTS ALONG GOSPOSVETSKA CESTA, JUGOMONT AND KOROŠKA CESTA ACCORDING TO THE PERIOD OF CONSTRUCTION
 SL. 1. USPOREDNA PROCJENA STAMBENIH NASELJA NA GOSPOSVETSKOJ CESTI, JUGOMONT I KOROŠKOJ CESTI PREMA VREMENU IZGRADNJE



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INFLUENCE OF STRUCTURAL CHANGES IN POLITICS AND THE ECONOMY ON THE QUALITY AND INTEGRITY OF RESIDENTIAL ENVIRONMENTS IN SLOVENIA MARIBOR CASE STUDY

UTJECAJ STRUKTURNIH PROMJENA U POLITICI I EKONOMIJI NA KVALITETU I INTEGRITET STAMBENIH NASELJA U SLOVENIJI ANALIZA PRIMJERA MARIBORA

ASSESSMENT
MARIBOR, SLOVENIA
QUALITY
RESIDENTIAL ENVIRONMENT
SOCIO-ECONOMIC CHANGES
URBAN DESIGN

PROCJENA
MARIBOR, SLOVENIJA
KVALITETA
STAMBENO NASELJE
SOCIO-EKONOMSKE PROMJENE
URBANI DIZAJN

The paper identifies the quality and integrity of residential environment [RE] in Slovenia that changed according to socio-economic circumstances when the new socialist society in the Yugoslav era (1945-1990) was formed and was substantially changed in the post-independence era of the liberal market society. The research of RE from different periods was conducted in the city of Maribor. The results indicate differences in quality in the period of the Scandinavian influence, engineering economy parameters after the housing reform, and of the market economy after independency.

U članku se analiziraju stambena naselja [RE] u Sloveniji s obzirom na njihovu kvalitetu i integritet koje su se mijenjale ovisno o socio-ekonomskim okolnostima: najprije u kontekstu socijalističkog društvenog poretka u vrijeme Jugoslavije (1945.-1990.), a zatim nakon stjecanja državne neovisnosti u okolnostima slobodnog tržišta. Rad donosi istraživanje stambenih naselja u Mariboru u različitim vremenskim razdobljima. Rezultati ukazuju na kvalitativne razlike u razdoblju skandinavskog utjecaja, kao i parametre inženjerske ekonomije nakon stambene reforme i tržišne ekonomije nakon stjecanja nezavisnosti.

INTRODUCTION

UVOD

The most important milestones in the development of housing and residential environments [RE] after World War II in Slovenia are the consequences of structural changes in politics and the economy.¹ Housing construction in the post-war era arose in the context of a great deficiency of dwellings and new socio-economic circumstances where the collective housing construction was put in the foreground.² During socialism, it developed in four distinct periods: Socially-organised constructions between 1945 and 1990 marked four periods: the administrative-budgetary approach to construction (1945-1955), the period of housing funds (1955-1965), the period of the construction for the market (1965-1975), and the period of directed construction (from 1975 on).³ The new era represented by the independence of Slovenia at the beginning of the 1990s and the political economic changes in transition to capitalism and the market economy changed the role of the state in the housing sector and its characteristics.⁴

Two key facts in the development of socially-organised housing construction between 1945 and 1990 were: firstly, the introduction of mandatory housing contribution for the employed in 1956 that caused systematic fund-raising, and secondly, the Law of Housing Contribution⁵ from 1958 that was the basis for the acquisition of larger built-up areas, and with it, the possibilities for large-scale development of residential neighbourhoods.⁶

From the beginning of the 1960s to the end of the construction of large scale RE in the early 1980s, residential neighbourhoods were a novelty in the organisation of housing and in the growth of Slovenian cities.⁷ The planning and design of RE at that time were strongly influenced by Scandinavian and Northern European countries, which developed a model of housing construction based on a neighbourhood unit in contrast to the post-war housing development with homogenous use, would allow full-time social life.⁸ Scandinavian countries strove to raise the housing standard, which did not only refer to the housing design, but also to a higher quality of the residential environment design as a whole.⁹ Many residential units adapted to the character of the terrain were built in the city.¹⁰ In the post-war period characterised by large-scale construction, Sweden attracted many Nordic and foreign architects with its powerful economic status.¹¹ The direct connection of Slovenian architects with Scandinavian architecture in that period is the result of their long stay in this country.¹² In the 1950s, they represented the Slovenian “colony” of architects in Sweden. The result of study trips, stay and work in Sweden was in many cases the transfer of their living culture to our space. Scandinavian¹³ experiences brought the comprehensive approach in the RE development as well as better quality.

The 1960s, -70s, and 1980s are the periods of the most intense construction of residential neighbourhoods in Slovenia.¹⁴ Important milestone in housing construction was the second housing reform in 1965. Market rules prevailed in the housing economy, which in-

1 ZUPANČIČ, 2000: 171

2 PLANINŠČEK, 2012

3 PEČENKO, 1984

4 LESTAN *et al.*, 2013

5 https://fotogalerija.dz-rs.si/datoteke/Publikacije/Zborniki_RN/2019/Pridobivanje_lastninske_pravice_na_nepremicninah_v_Sloveniji.pdf

6 BEŽAN, 1984; ZUPANČIČ, 2010: 172

7 MALEŠIČ, 2015

8 MIHELIČ, 1983: 55

9 Nordic Associations of Architects, 1978: 9-18

10 NILSSON, 2006: 104

11 CALDENBY, WEDEBRUNN, 2010: 14

12 Ljubo Humek, Marta Ivanšek, France Ivanšek, Mitja Jernejec, Niko Bezek, Ales Sarec, Lucka Sarec, Jernej Bevk and others. Sweden attracted with its tradition of housing construction, in particular the housing neighbourhood design. The core of neighbourhoods was a green area intended for public functions. [KOSELI, 1995: 27-28]

13 In the book *Det Framida Stockholm – Stockholm in the future (1945)*, guidelines for the general plan of the city of Stockholm, based on the neighbourhood's concept, were presented. Each neighbourhood is planned for 10,000 inhabitants, with the centre by the metro station, with shopping, cultural and service facilities, and residential buildings; it is surrounded by lower buildings and with lower density. [NYSTROM, LUNDSTROM, 2006]

14 LESTAN *et al.*, 2013

fluenced the quality of the RE implementation¹⁵; nevertheless, the construction of residential neighbourhoods means a change in quality in the post-war multi-dwelling development in Slovenia, which has not been upgraded in scale and quality since.¹⁶

In 1991, the year of independence, a new Housing Act was adopted, which determined the legal basis for the termination of social property in the housing sector, introducing new institutions and allowing privatisation. The essence of privatisation was in the transfer of responsibility for housing supplies from the state to the market; the purchase of dwellings and privatisation was one of the central occurrences of privatisation.¹⁷ The obligation to supply dwelling was substituted in the Constitution by the obligation to enable the acquisition of dwelling with individuals' effort.¹⁸ The practically complete absence of housing construction from public funds and thus the dominance of private investors' interest in profit is reflected in higher building density which prevents the proper formation and placement of green areas and common spaces, which would contribute to improving the quality of the RE.¹⁹

It is characteristic of newer RE that they were built in the early 1990s, at the time of the political and economic changes and transition to the market economy, that they are distinctively mono-functional without, or with poor, social infrastructure. Open spaces and green areas between buildings in newer RE are fewer and in a limited programme compared to older residential neighbourhoods built under collective housing.²⁰ Since the 1990s, plan-

ning in Slovenia has often been limited and focused only on housing construction and less to the design of green areas, public space and parking facilities.²¹ Also, the current renovation of the residential fund is not comprehensive, as it is focused mainly on energy renovation of the facade envelope.²²

RESEARCH OBJECTIVE AND HYPOTHESIS

ČILJ ISTRAŽIVANJA I HIPOTEZA

The main objective of the research for this paper is to show the declining quality and integrity of RE in Slovenia according to structural changes in politics and the economy since the 1950s according to different periods of construction. The neighbourhoods from the 1950s and 1970s were a qualitative contribution in the housing field especially according to the Scandinavian examples from that time. However the implementation was worse than the planned ideas from the point of view of the comprehensive approach after 1965. Also, in the 1990s, the introduction of the liberal-democratic social system significantly contributed to the deterioration of the quality of RE. In the paper, the following hypothesis was formulated: (i) *The change of the political-economic system influence the quality and integrity of residential environments. A comparative and comprehensive assessment of RE from three different periods in Maribor confirms differences in quality. The assessment is carried out by the original method based on the comprehensive system of the REL (residential environment liveability) criteria. The research confirms the hypothesis.*

THEORETICAL FRAMEWORK

TEORIJSKI OKVIR

SCANDINAVIAN INFLUENCE AND RESIDENTIAL ENVIRONMENT DEVELOPMENT IN SOCIALISM BETWEEN 1955 AND 1965

SKANDINAVSKI UTJECAJ I RAZVOJ STAMBENIH NASELJA U VRIJEME SOCIJALIZMA (1955.-1965.)

In post-war Slovenia, the issue of housing shortage was the main urban development issue apart from industrialisation, which was the consequence of the destruction in WW2, and of the migrations of people to cities and industrial centres.²³ The promotion of deagrification required systemic fund-raising for housing construction with compulsory contribution from each employer.²⁴

In the 1950s, architects across Europe as well as in Slovenia mainly dealt with housing issues.²⁵ The closest to Slovenian architects in the 1950s were Swedish architecture and ur-

¹⁵ High building density and lesser interest in the parallel construction of non-residential activities. [MIHELIC, 1983: 52]

¹⁶ MALEŠIĆ, 2015

¹⁷ ZUPANČIĆ, 2000: 174

¹⁸ Every individual alone is responsible for solving their housing problem except the inhabitants unable to ensure own housing. [PLANISČEK, 2010]

¹⁹ GAZVODA, 2001

²⁰ LESTAN *et al.*, 2013

²¹ GAZVODA, 2001

²² KRISTOF, 2015

²³ During the first post-war period, the reconstruction was carried out centrally within an administratively managed planning economy. Other social services were also centralised, including urban planning which initially operated within the Ministry of Construction [MIHELIC, 1983: 23]. The first housing settlements were built in close proximity to industrial buildings. They were characterised by rigid spatial and design concept, uniformity, lack of materials and sanitary equipment, poor quality of construction and craft works, a lack of municipal facilities, and the distance of new settlements from supply centres [KOSELI, 1995: 9].

²⁴ BEŽAN, 1984

²⁵ They carried out professional and research studies, prepared numerous competitions, exhibitions and discussions. The Society of Slovenian Architects was established. [KOSELI, 1995]

banism.²⁶ At that time, Sweden was a role model for Slovenia in its understanding and solving of social issues as well as in the central role of residential development.²⁷ The new state housing programme in Scandinavia became an integral part of modern social welfare policy.²⁸ Direct contact with Scandinavian countries was largely maintained by France Ivanšek, Marta Ivanšek and Ljubo Humek.²⁹ At the beginning of the 1950s, architect Edvard Ravnikar and his students at the School of Architecture started developing the concept of a neighbourhood³⁰, relying primarily on Swedish examples.³¹ Ravnikar's organisational scheme of the neighbourhood was presented at the exhibition Family and Household in 1958 in Zagreb.³² Among the first examples in Slovenia based on the Swedish model is the RE in Maribor along Gosposvetska cesta (1954-1961). It involves not only the aspect of composition and new residential typologies, but also its role in the development of RE is important because of the design of open space and green areas as well as the realisation of buildings with social services.³³ The first more ambitiously designed neighbourhoods in Ljubljana was ŠS-6³⁴ (the Šiška neighbourhood, 1966), which was facilitated by the above mentioned systemic collection of money for housing construction and the acquisition of land by nationalisation.³⁵ The programme and the design of open space in this neighbourhood are one of the best residential green areas in Slovenia until the 21st century.³⁶

Between 1955 and 65, when housing construction was in the hands of architects inspired mostly by the housing architecture in Scandinavia, the field of residential architecture was characterised by a scientific and research approach, a connection between urban and architectural planning, efforts to harmonize architectural elements with technology, efforts to obtain a typological expression of various forms of residential buildings, search for flexible dwelling and a variable housing structure as well as aspirations for their own expression and indigenous dwelling plan.³⁷

THE SECOND HOUSING REFORM IN 1965

DRUGA STAMBENA REFORMA (1965.)

The administrative role of the state in the housing economy was limited in 1965 with the Resolution of further development of the housing economy system.³⁸ When the state withdrew from housing construction and left it to construction companies, apartments became "market goods".³⁹ The period of "building for the market" as a distinct category of the market economy had a fairly fatal impact on the further quality development of resi-

dential architecture. The role of an architect was clearly subordinate to that of a contractor who becomes an investor, causing architectural development to stagnate. Housing construction was mainly subordinate to economic demands.⁴⁰ "There were even speculative approaches, i.e. the heightening of buildings during construction in contrast to adopted urban projects, the abandonment of consistent implementation and of open space design, and the arbitrary deterioration of architectural elements."⁴¹ Generally, neighbourhood community centres were not realised.⁴² One of the main reasons for this were different sources of housing finance on the one hand, and social infrastructure on the other. The requirements pointed out as the starting points for the design of housing construction by investors at that time were derived primarily from the cost-effectiveness of the construction work. In the BS7 neighbourhood in Ljubljana, which was the first neighbourhood in Slovenia built for "the market", 50 per cent of underground parking spaces was abolished in comparison with urban design, and despite the adopted urban and architectural projects, the streets and the programme of public central functions in the streets were not built.⁴³ In Maribor, the most notable example of poor RE design from this period is the RE of Jugomont built around 1965. The uniformity of the appearance of building volumes is achieved, as a single construction approach is used. Nevertheless, the settlement is monotonous in terms of dividing green areas and open space, and placing public programmes, which would form a comprehensive living environment.⁴⁴

The period of neighbourhood development has positive and negative consequences.

²⁶ MIHELIC, 1983: 26

²⁷ HUMEK, 1952

²⁸ IVANSEK, 1955

²⁹ MERCINA, 2006: 20

³⁰ Examples of the morphological model of the radial city development in Ljubljana along the main access roads, followed by neighbourhoods and their centres, are followed by the Scandinavian and in particular the Stockholm City Plan [MIHELIC, 1983].

³¹ MALEŠIĆ, 2015

³² BEŽAN, 1984

³³ The author of the urban plan is architect Ljubo Humek, who was one of the first people to travel to Scandinavia (between 1951 and 1952) and had one of the key roles in the development of residential construction. [PIRKOVIC, 1982: 54-56]

³⁴ MALEŠIĆ, 2016

³⁵ BEŽAN, 1984

³⁶ GAZVODA, 2001

³⁷ PEČENKO, 1984

³⁸ MALOVRH OLUP, 1978

³⁹ ZAVIRSEK HUDNIK, 2015

⁴⁰ PEČENKO, 1984

⁴¹ BEŽAN, 1984

Nevertheless, it represents a progressive period in the development of Slovenian collective housing architecture. Unquestionable qualities of neighbourhoods remain large open spaces between buildings, rich greenery, various residential typologies and floor plans of dwellings.⁴⁵ The new funding system did not contribute to the quality of housing; residential construction was subordinate to the market, the construction industry and standards. More ambitious projects were never realized.⁴⁶ However, many examples from abroad were poorly transferred to Slovenia, lacking creative imagination and relation to the natural environment and the human scale.

INDEPENDENCE OF SLOVENIA, AND POLITICAL AND ECONOMIC CHANGES IN THE 1990S

NEZAVISNOST SLOVENIJE I POLITIČKO-EKONOMSKE PROMJENE 1990-IH

Due to rising inflation and a decrease in the economic strength of companies in 1987, the amount of housing construction began to decline. In 1991, following transition to the liberal democratic political system and the market economy, new financial legislation was introduced to abolish the housing contribution from income.

At the same time, there were no alternative systemic resources for financing and the amount of housing construction was drastically reduced. The Housing Act (1991) was the first of the transitional acts that defined changes in the housing sector and introduced a new organisation of the housing sphere in

Slovenia.⁴⁷ In 1991, 90 per cent of the social housing fund passed into private ownership through the purchase of social housing. Investors of housing construction were mostly large construction companies, which were privatised after the independence, as well as new companies; they all built exclusively for the market.

Investors often demand an unreasonable built-up density – private investors thus generate more profits, and public investors want to cater to as many people as possible. In both cases, new RE are too dense, open and public spaces are disappearing, floor plans of dwellings are obsolete and inflexible.⁴⁸ The consequence of ownership changes following extensive privatisation after 1991, and includes preserving and maintaining of green areas in RE. The result is the decay of green areas and the abandonment of open space. In new RE, the question arises to what extent green areas are actually quantitatively and qualitatively included in the environment.⁴⁹

The former clearly structured programme concept of a residential neighbourhood with intertwined built structures and open spaces turned to distinct monotony of new RE. Open space is missing or is fragmented to functionally inadequate and insufficiently sized segments.⁵⁰ Slovenia has no valid norms and recommendations that would unequivocally commit to the consistent designing and dimensions of open space in RE.⁵¹ Attention is also paid to the state's negative attitude towards research in spatial sciences with a reduction in financial support, and failure to take into account the results of research work in the preparation of spatial policies.⁵²

42 MALEŠIČ, 2016

43 Parameters for the rationality of the projects, the coefficients for the permissible faceted facade, the vertical and horizontal dimensions of the building, the rationality (read: simplicity) of the construction, etc. were formed. Urban design must come from the acquired technology of the construction company (investor) to support the simplest technology of construction machinery housing needs to be separated from central and accompanying functions (with this requirement, all public activities were excluded from the complex of residential buildings); it is necessary to provide as many equal housing units as possible – they should be repeated as often as possible; it is important to look at the smallest facade faces, the length of the ranges should be the smallest, and note that only P+4 (maximum floors without lifts), P+7 (one lift) and P+12 (two lifts) are "economical". [BEZAN, 1984]

44 PIRKOVIČ, 1982: 56

45 PLANINŠČEK, 2012

46 MIHELIČ, 1983: 26

47 ZUPANČIČ, 2000: 174

48 PLANINŠČEK, 2010

49 GAZVODA, 2001

50 GAZVODA, 2006

51 SIMONETI *et al.*, 2006: Foreword

52 MIHELIČ, 2010

RESEARCH METHODOLOGY

METODOLOGIJA ISTRAŽIVANJA

The research method is based on the analysis of existing written material – sources and literature on the historical development and characteristics of housing construction in Slovenia (first step). In the second step, based on theoretical premises concerning Slovenian housing development, the research includes case study analyses of residential environments in Maribor.

Maribor was included in the research because of its distinct development features by periods: by World War II, it had been the fastest developing city in the country, and during World War II, it became one of the most destroyed cities in Yugoslavia. In the city area, 47 per cent of buildings were destroyed and seriously damaged after the war. Due to the renewal of the city, a consultation on the new

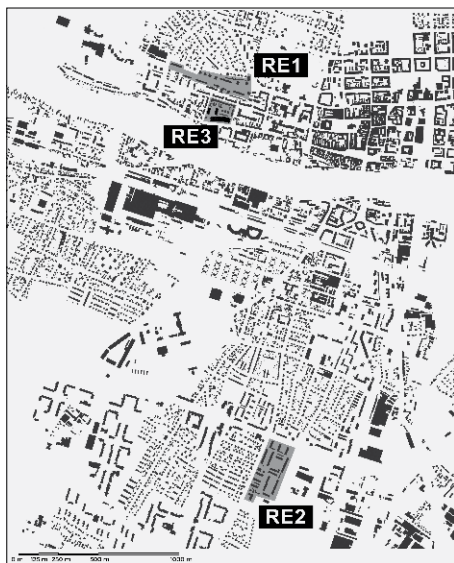
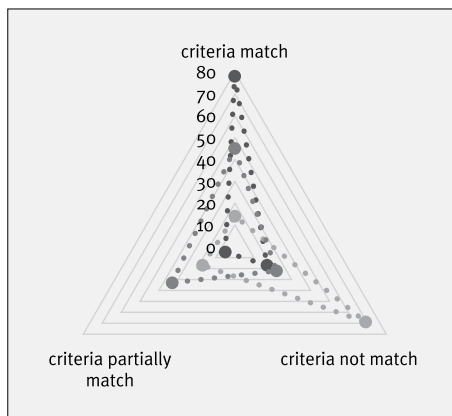


FIG. 2 THE LOCATION AND MORPHOLOGY OF THE RESIDENTIAL ENVIRONMENTS ALONG GOSPOSVETSKA CESTA [RE1], JUGOMONT [RE2] AND KOROŠKA CESTA [RE3] IN THE CITY OF MARIBOR
 SL. 2. LOKACIJA I MORFOLOGIJA STAMBENIH NASELJA NA GOSPOSVETSKOJ CESTI [RE1], JUGOMONT [RE2] I KOROŠKOJ CESTI [RE3] U GRADU MARIBORU

FIG. 3 COMPARATIVE ASSESSMENT OF THE RESIDENTIAL ENVIRONMENTS ALONG GOSPOSVETSKA CESTA (BLACK), JUGOMONT (DARK GREY) AND KOROŠKA CESTA (LIGHT GREY) ACCORDING TO THE SHARE OF INCLUDED REL CRITERIA
 SL. 3. USPOREDNA PROCJENA STAMBENIH NASELJA NA GOSPOSVETSKOJ CESTI (CRNO), JUGOMONT (TAMNO SIVO) I KOROŠKOJ CESTI (SVIJETLO SIVO) PREMA UDJELU UKLJUČENIH REL KRITERIJA



main regulatory plan in Maribor was carried out in 1945/1946. The plan was finalised when the field of urban planning was not regulated in Yugoslavia (1949). Maribor was the first Slovenian city to start systematically resolving its urban planning problems. In the actual construction, the greatest emphasis was on housing construction. The arrangement along Gospodsvetska cesta in Maribor is the first example of the use of the Swedish motif – idea of a neighbourhood in Slovenia. After Slovenia had gained independence, Maribor was hit by severe unemployment because of the collapse of large companies that lost the Yugoslav market. Prior to Slovenia's independence, Maribor had been an economically developed city, so the wave of bankruptcies was a huge blow when it came to the market economy, which affected the diverse levels of living in the city.

RE from different periods were analysed: RE from the period of housing funds (1955-1965), and construction for the market (1965-1975) to the period after Slovenia had gained independence (1991). These periods are crucial turning points in the design of housing and RE as well as the quality characteristics of RE (Fig. 1). The comparative analysis of RE was performed on three case studies in Maribor from different periods. The first is the RE along Gospodsvetska cesta (1954) with holistic approach to planning from the period of Scandinavian influences and first example of using this motif in Slovenia; the second is the RE of Jugomont built just after the housing reform in 1965⁵³ and the third is the RE along Koroška cesta completed in 2007, which is one of the last examples of housing construction built as an enclosed large-scale residential area.⁵⁴ RE also differ in the principles of urban space use: construction on the land within a build-up area [RE1], construction on the land within a non-built-up area [RE2], and construction on the principle of densification and restructuring [RE3] as shown in Fig. 2.

The case study research included a review of available project documentation, archive material and available data, site work mapping, and case evaluation. The assessment was carried out on the basis of the REL criteria system.⁵⁵ In general, the methodology of this research is based on a survey of the state and development tendencies in the field of housing in Slovenia, and the evaluation of RE in Maribor using the REL criteria system for assessing the quality of the RE.

RESULTS

REZULTATI

In Table I, a comparison of RE along Gospodsvetska cesta (RE1 from the period between 1955 and 1965), Jugomont (RE2 from the period between 1965 and 1975) and along

Koroška cesta (RE3 after 1991) according to the REL criteria is presented.

It is possible to conclude from the results of the comparative analysis that around 80 per cent of the criteria, which provide a quality RE for living and represent a comprehensive approach match in RE1 (Gospodsvetska cesta from the period between 1955 and 1965). Contemporary RE as seen in RE3 (Koroška cesta from the period after 1991), is not in accordance with the REL quality criteria because around 70 per cent of the criteria do not match and consequently offer poor quality living conditions. In RE2 (Jugomont from the period between 1965 and 1975) 45 per cent of the criteria match, which shows worse quality than RE1 and significantly better than RE3 as shown in Fig. 3.

The comparative assessment shows a significant deviation in the design and share of green areas and open space between RE. It is noticeable that the share of green areas is decreasing from RE1 and RE2 to RE3. There is also a noticeable difference between RE in the variety of different housing typologies, the articulation of open space, recognisability, engagement with urban context and liveliness. In the RE along Koroška cesta (Fig. 6), the connection between the street and the RE is undefined. The ground floors of the buildings along Koroška cesta are partly intended for public programmes, but remain empty or used for garages. the quota of green areas is negligible. The RE is unattractive for walking because the open public space is subordinate to traffic infrastructure, and mainly designed as an asphalt base above underground garages. The morphology of the new residential complex does not fit to the wider urban context. On the contrary, qualitative elements of the RE along Gospodsvetska cesta (Fig. 4) from the 1950s are different housing typologies, large green areas between buildings and the clearly defined delimitation of the RE and other urban areas, taking into account the local context in the design of an open space and buildings as well as the presence of public programmes. In contrary to RE3, the quality of public places in RE1 and RE2 has been improved by the placement of

⁵³ The residential environments along Gospodsvetska cesta [RE1] and Jugomont [RE2] are designed as a complete unit on unbuilt urban areas, while the smaller RE along Koroška cesta [RE3] represents the restructuring area of single-family buildings and rounds off the RE from previous periods. The author of the urban design at Gospodsvetska cesta is architect L. Humeč, director of the project design office Komuna projekt, which has also designed the new residential complex along Koroška cesta and multi-dwelling buildings from the 1950s.

⁵⁴ Until 2018, due to the economic crisis, only the construction of individual housing interpolations or the envisaged more complete housing development that remained unfinished were present in Maribor. In 2018, the con-

TABLE I COMPARISON OF RESIDENTIAL ENVIRONMENTS ALONG GOSPOSVETSKA CESTA [RE1], JUGOMONT [RE2] AND KOROSKA CESTA [RE3] ACCORDING TO THE REL CRITERIA / + (INCLUDED) / - (NOT INCLUDED) / 0 (PARTIALLY INCLUDED)
 TABL. I. USPOREDBA STAMBENIH NASELJA NA GOSPOSVETSKOJ CESTI [RE1], JUGOMONT [RE2] I KOROSKOJ CESTI [RE3] PREMA KRITERIJIMA PRIKLADNOSTI STAMBENOG NASELJA ZA ŽIVOT [REL – RESIDENTIAL ENVIRONMENT LIVEABILITY] + (UKLJUČENO) / - (NEUKLJUČENO) / = (DJELOMIČNO UKLJUČENO)

	CRITERIA	RE1	RE2	RE3
E 1.1	Prevention of urban sprawl and impact on surrounding natural environment	+	+	+
E 1.2	Regeneration within the existing city boundary and development of brownfields	+	0	+
E 1.3	Closer proximity to the various amenities of everyday life	+	+	+
E 1.4	Promoting walking, cycling, and use of public transport	+	+	0
E 2.1	Reduction of energy	+	0	+
E 2.2	Supply of energy from renewable sources	-	-	-
E 2.3	Improving efficiency in energy supply and distribution by installing district energy networks	-	+	+
E 2.4	Decreasing light pollution and energy consumption, necessary for lighting	-	-	-
E 2.5	Local use of rainwater and storm water	-	-	-
E 2.6	Protection and enhancement of water resources, green areas, vegetation	+	+	-
E 3.1	Recycled and on-site reuse building material	-	-	-
E 3.2	Waste recycling and use of combustible waste for fuel in energy cogeneration	-	-	-
S 1.1	Distinction between private and public space; hierarchy of open spaces in a residential environment	+	0	-
S 1.2	A residential environment enabling leisure and strengthens social interactions	+	+	-
S 1.3	Maintained residential environment	0	0	0
S 1.4	Involvement of residents in the residential environment	+	+	-
S 1.5	Awareness, participation, and education of residents – active role of residents in the residential environment	+	+	0
S 2.1	Lively and controlled neighbourhood public space	+	+	0
S 2.2	Protection of private space and interaction with public space	+	+	-
S 2.3	Design of residential environment, enabling orientation in space	+	0	-
S 2.4	Lighting of open space in the residential environment	0	0	-
S 2.5	Priority for pedestrian and traffic safety	+	0	-
S 3.1	The human scale of the residential environment	+	+	-
S 3.2	Reducing noise level and creating quiet areas	+	0	-
S 3.3	Reducing the heat island effect	+	0	-
F 1.1	Integration of different social and age groups into the residential environment	+	0	0
F 1.2	Universal design: designing open public spaces accessible to all	+	0	0
F 1.3	Open space, i.e. social space	+	+	-
F 2.1	Residential environment connecting the residents and other city dwellers	+	+	-
F 2.2	Promoting movement: walking and cycling	+	+	-
F 2.3	Temporary use and shared use of space	+	-	-
C 1.1	Engagement with urban context	+	-	-
C 1.2	Protection of natural and cultural heritage	+	+	-
C 2.1	Recognisability of residential environment	+	0	-
C 2.2	Walking-friendly and lively residential environment	+	-	-
C 3.1	Empirical and sensory rich residential environment	+	+	-

struction of more large-scale RE and urban planning competitions of RE reappeared.

55 The proposed REL criteria system for comprehensive assessment of residential environment quality was based on the original deductive methodology, which is drawn upon Scandinavian contemporary experience as a historically sophisticated housing culture. Criteria are arranged into 4 different aspects (environmental E, sociological S, functional F, and cultural C) and presents a set of spatial indicators complemented with indicators of complementary disciplines. Quantitative and qualitative indicators refer to different elements of the physical form of residential environment: buildings, open space and green areas, program, supply, and traffic. [SKALICKY, ČERPES, 2019]

56 CIGLENCKI, 2018

sculptures from forma viva (international art workshops between 1967 and 1987⁵⁶). Large green areas and the presence of public services are still characteristic of the RE of Jugomont. A deviation from previous period may be noticed in the monotony of the RE; only one housing typology (15 lamella blocks) determines the whole area. That made construction cheaper and faster, which does not follow the context (Fig. 5).

Gospovetska cesta is an example of the planning of an RE with a holistic approach to



FIG. 4 RESIDENTIAL ENVIRONMENT ALONG GOSPOSVETSKA CESTA [RE1] IN MARIBOR, 2018

SL. 4. STAMBENO NASELJE NA GOSPOSVETSKOJ CESTI [RE1] U MARIBORU, 2018.

FIG. 5 RESIDENTIAL ENVIRONMENT OF JUGOMONT [RE2] IN MARIBOR, 2017

SL. 5. STAMBENO NASELJE JUGOMONT [RE2] U MARIBORU, 2017.

FIG. 6 RESIDENTIAL ENVIRONMENT ALONG KOROŠKA CESTA [RE3] IN MARIBOR, 2017

SL. 6. STAMBENO NASELJE NA KOROŠKOJ CESTI [RE3] U MARIBORU, 2017.

urban design. In Jugomont, shortcomings in the implementation and dominance of the construction sector are shown, while in Koroška cesta, drastically reduced green areas and the almost complete abandonment of elements of quality urban design is seen.

Fig. 7 shows the comparative assessment of the residential environments in Maribor according to the Table I in scores (criteria included = 1, partially included = 0.5, not included / max = 36 scores) and the period/year of construction – along the Gosposvetska cesta from 1954 (29 scores), Jugomont from 1965 (22 scores) and Koroška cesta from 2007 (8 scores).

CONCLUSION

ZAKLJUČAK

The paper explores the development of RE since World War II until the present in Slovenia

in the case of the city of Maribor, and exposes the impact of changes in the political and economic system on the quality of RE. Using the original method for evaluating the quality of RE, we found significant differences in the quality of RE with respect to the time of their construction. In the 1950s and early 1960s when many Slovenian architects worked in Sweden and transferred new knowledge to Slovenia, RE were designed with the aim to achieve the well-being of inhabitants. The field of housing construction was characterised by a research approach and the ambitious design of comprehensive residential environments.

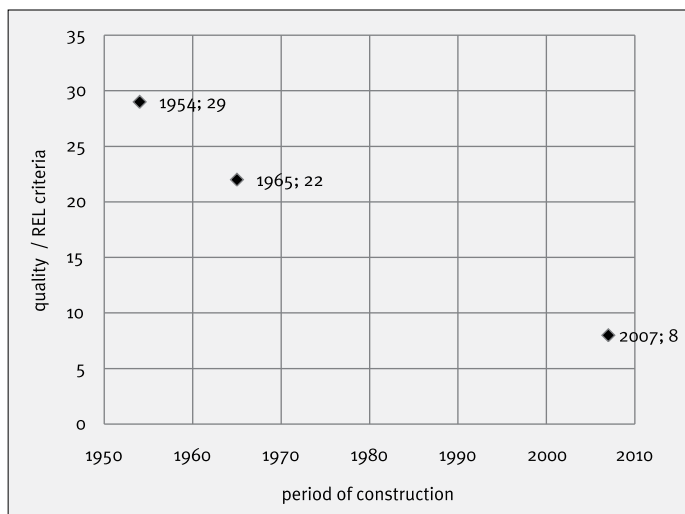
Although Scandinavian models were still present later, the implementation of RE after

⁵⁷ Meanwhile, for the capital of Ljubljana, RE features from different periods are presented in the article in the framework of summaries of different authors. Ljubljana and Maribor are the cities with the largest number of residential neighbourhoods built.

1965 was generally significantly worse than planned. The housing reform highlighted the principles of cost-effectiveness of the construction work in the design and implementation of RE, with the related exclusion of the scientific and research approach, while ignoring architectural and urban elements and, above all, neglecting social infrastructure. This led to lower quality of RE.

Gradual transition to the market economy and the reduced role of the state as the main actor in housing supply as well as related exclusion of the scientific and research approach have limited further quality design of RE. Since 1991, the quality of RE has significantly deteriorated due to changed housing policies as a consequence of the liberal-democratic political system that were determined by the liberal-democratic social order, privatisation and the market-oriented economy. Because of the prevailing influence of private investors in the housing market, a higher share of built-up areas is characterised by a reduced share of green areas and social content, which is reflected in the monotony of RE.

The paper introduces the quality assessment of three RE from different milestone characteristic political and economic periods in Maribor. The assessment in the REL methodology showed a difference in quality between the first, the second and the third case according to the time of their construction. While the quality of residential environments in the first case (from the period of housing funds/state housing management modelled on Scandinavia) approached the REL criteria, the evaluation of the second and the third case (from the period after the housing reform and the transition to the market economy) showed a significantly lower quality compared to the first case. On the basis of re-



search and criteria assessment, we found significant differences in the quality of RE with respect to the time of their construction and structural changes in politics and the economy.

The purpose of the comparative analysis of the RE in Maribor from different periods is to show that the quality RE in Slovenia is decreasing from 1960s to nowadays because of structural political and economic changes on the state level and housing legislation. The research includes case study analyses from Maribor, which clearly illustrate the typical features of these changes, so it can be legitimately concluded that this research is representative of the whole of Slovenia.⁵⁷

[Written in English by the authors;
proof-read by LAURA CUDER TURK,
univ.dipl.angl.]

FIG. 7 COMPARATIVE ASSESSMENT OF RESIDENTIAL ENVIRONMENTS IN MARIBOR FROM DIFFERENT PERIOD
SL. 7. USPOREDNA PROCJENA STAMBENIH NASELJA U MARIBORU IZ RAZLIČITIH RAZDOBLJA

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ILLUSTRATION AND TABLE SOURCES

IZVORI ILUSTRACIJA I TABLICE

- FIGS. 1, 3-7 Authors
- FIG. 2 Cartographic morphology background: KLEMENČIČ, 2011
- TABLE I Authors

SUMMARY

SAŽETAK

UTJECAJ STRUKTURNIH PROMJENA U POLITICI I EKONOMIJI
NA KVALITETU I INTEGRITET STAMBENIH NASELJA U SLOVENIJI

ANALIZA PRIMJERA MARIBORA

Članak donosi istraživanje razvoja stambenih naselja u razdoblju od završetka Drugoga svjetskog rata do danas i analizira utjecaj promjena u politici i ekonomskom sustavu na kvalitetu i integritet stanovanja i stambenih naselja. Poslijeratna stambena izgradnja razvila se zbog velikog pomanjkanja postojećih stambenih jedinica i u kontekstu novih socioekonomskih okolnosti u kojima je u prvi plan došla kolektivna stambena izgradnja. Društveno organizirana stambena izgradnja u razdoblju od 1945. do 1990. razvijala se kroz 4 različite etape: administrativno-proračunski pristup izgradnji, 1945.-1955.; razdoblje stambenih fondova, 1955.-1965.; razdoblje izgradnje za tržište, 1965.-1975.; razdoblje planirane izgradnje od 1975. Novije razdoblje od stjecanja državne neovisnosti Slovenije početkom 1990-ih godina i u kontekstu političko-ekonomskih promjena u doba prijelaza na kapitalizam i tržišnu ekonomiju promijenilo je ulogu države u stambenom sektoru, kao i njegove karakteristike.

Od pedesetih godina 20. stoljeća do kraja razdoblja izgradnje velikih stambenih naselja ranih 80-ih godina 20. stoljeća stambene su četvrti bile novost u organizaciji stanovanja i razvoju slovenskih gradova. Osobito su skandinavske i sjevernoeuropske zemlje razvile model stambene izgradnje utemeljen na konceptu četvrti (*neighbourhood*), koja je, za razliku od poslijeratnih stambenih naselja s homogenom namjenom, omogućavala stalan društveni život. Skandinavske su zemlje nastojale podići standard stanovanja koji se odnosio ne samo na projektiranje stambenih jedinica već i na kvalitetnije projektiranje stambenog okoliša u cjelini. U poslijeratnom razdoblju velikih stambenih projekata Švedska je, kao ekonomski vrlo razvijena zemlja, privukla mnogo skandinavskih i stranih arhitekata. Tijekom 50-ih i ranih 60-ih godina 20. stoljeća, kada su mnogi slovenski arhitekti radili u Švedskoj i donijeli nova znanja i spo-

znaje kući, stambena su se naselja projektirala s ciljem postizanja dobrobiti za njihove stanovnike. Područje stambene izgradnje karakterizirao je istraživački pristup i ambiciozno projektiranje multifunkcionalnih stambenih naselja.

Dva su ključna čimbenika obilježila razvoj društveno organizirane stambene izgradnje između 1945. i 1990. godine: uvođenje obveznoga stambenog doprinosa za zaposlenike 1956., što je dovelo do sustavnog prikupljanja sredstava, te Zakon o stambenom doprinosu iz 1958. kao osnove za kupovinu velikih izgrađenih područja, a time i mogućnost sveobuhvatnog razvoja stambenih četvrti. U stambenoj je izgradnji važna prekretnica bila druga stambena reforma iz 1965. godine. Tržišna su pravila prevladala u stambenoj ekonomiji, a to je utjecalo na kvalitetu stambenih naselja. Arhitekt je bio podređen izvođaču koji postaje investitor, a to je dovelo do stagnacije razvoja u arhitekturi. Stambena je izgradnja uglavnom bila podređena ekonomskim zahtjevima. Iako su skandinavski modeli i poslije bili prisutni, stambena naselja nakon 1965. godine bila su u značajnoj mjeri losija od planiranoga. Stambena reforma naglasila je principe isplativosti građevinskih radova u projektiranju i izgradnji stambenih naselja te s time povezano isključivanje znanstvenoistraživačkog pristupa, dok su se istovremeno ignorirala arhitektonska i urbanistička načela, kao i, prije svega, zanemarivala socijalna infrastruktura. To je dovelo do losije kvalitete stambenih naselja.

Postupni prijelaz na tržišnu ekonomiju i oslabljenu ulogu države kao glavnog subjekta u osiguravanju stambenih jedinica, ali i isključivanje znanstvenoistraživačkog pristupa – još su više ograničili daljnje kvalitetno projektiranje stambenih naselja. Od 1991. godine kvaliteta stambenih naselja značajno je opala zbog promijenjene politike stanovanja koju je diktirao liberalno-demokratski društveni poredak, privatizacija i tržišno orijentirana ekono-

mija. Novija stambena naselja izgrađena nakon što je Slovenija stekla nezavisnost ranih 90-ih godina 20. stoljeća, u doba političkih i ekonomskih promjena i prijelaza na tržišnu ekonomiju, izrazito su monofunkcionalna, bez ili s vrlo slabo razvijenom društvenom infrastrukturom. Otvoreni prostori i zelene zone između zgrada u novijim stambenim naseljima reducirani su i ograničeni u usporedbi sa starijim stambenim četvrtima iz razdoblja kolektivnoga stanovanja.

U članku se analizira sve losija kvaliteta i integritet stambenih naselja u Sloveniji od 1960-ih godina, što je posljedica strukturnih, političkih i ekonomskih promjena na razini države i stambenoga zakonodavstva. Istraživanjem su obuhvaćeni primjeri u Mariboru koji jasno ilustriraju tipične značajke ovih promjena, tako da se može legitimno zaključiti kako je ovo istraživanje reprezentativno za cijelu Sloveniju. Hipoteza o utjecaju političko-ekonomskih okolnosti na kvalitetu i integritet stambenih naselja potvrđena je usporednom analizom triju stambenih naselja u Mariboru u različitim razdobljima.

Valorizacija je provedena na osnovi REL [*residential environment liveability*] kriterija utemeljenih na originalnoj deduktivnoj metodologiji koja potječe iz skandinavskoga suvremenog iskustva i sofisticirane kulture stanovanja. Usporedna procjena pokazala je razliku u kvaliteti između prvog, drugog i trećeg slučaja prema vremenu njihove izgradnje. Dok se kvaliteta stambenih naselja u prvom slučaju (iz razdoblja stambenih fondova / državnog upravljanja stambenom izgradnjom na primjeru Skandinavije) približila REL kriterijima, valorizacija drugog i trećeg slučaja (iz razdoblja nakon stambene reforme i u uvjetima prijelaza na tržišnu ekonomiju) pokazala je značajno nižu kvalitetu u usporedbi s prvim slučajem. Na osnovi istraživanja i kriterija valorizacije pokazale su se značajne razlike u kvaliteti stambenih naselja s obzirom na doba njihove izgradnje i strukturne promjene u politici i ekonomiji.

BIOGRAPHIES

BIOGRAFIJE

VANJA SKALICKY received PhD in architecture from the Faculty of Architecture, University of Ljubljana. She is an architect and researcher. Her studies were also conducted in Scandinavian countries researching residential environments and urban design.

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Dr.sc. **VANJA SKALICKY**, arhitektica, doktorirala je na Arhitektonskom fakultetu Sveučilišta u Ljubljani. U sklopu svoga znanstvenoistraživačkog rada bavila se također i istraživanjem stambenih naselja i urbanim dizajnom u skandinavskim zemljama.

Dr.sc. **ILKA ČERPES**, arhitektica, doktorica znanosti i docentica na Katedri za urbanističku teoriju i planiranje. Autorica je monografija *O urbanizmu i urbanističkom planiranju*. Objavila je preko 15 znanstvenih i stručnih radova.