

Ponovno razmišljanje o prihodnosti bivanja: k fleksibilnemu, trajnostnemu in ekološkemu sistemu

Povzetek

V kontekstu globalnih izzivov in hitrega razvoja digitalnih tehnologij vprašanje bivanja prihodnosti dobiva na pomenu in aktualnosti. Pričujoči prispevek kritično odpira naslednja vprašanja: zakaj je danes pomembno obravnavati to temo; kakšno je stališče sodobnih arhitektov do danega konteksta; v kakšnih stanovanjih bivamo danes in v kakšnih bomo bivali jutri ter; ali bomo imeli zmogljivosti, da jih oblikujemo kot skupno dobro, ne le kot blago na trgu. S premislekom o dragocenih izkušnjah in naukih iz preteklosti ter o sedanjosti, ki jo zaznamuje nekritična uporaba tržnih načel, bivanje zahteva temeljito (ponovno) razmišljanje in vzpostavitev novega vrednostnega sistema, ki združuje fleksibilnost, trajnost in ekološko odgovornost kot nove in sodobne vrednote. Namen pričujočega prispevka je, da s kritično presojo preteklosti in sedanjosti, s prepoznavanjem obstoječih izzivov ter s predvidevanjem možnih in zaželenih smeri (ponovnega) razmišljanja o bivanju odpre širše polje za razpravo v multidisciplinarnih krogih.

“The apartment is a dynamic and self-regulating system, which, in harmony with its environment, is actively engaged in fulfilling its goals.”¹

Architect Mihailo Čanak, 1976

¹ Čanak, 1976: 435.

Ključne besede: *Bivanje, Fleksibilnost, Trajnost, Ekološka odgovornost, Vrednost, Sistem*

(Re)thinking the Future of Dwelling: Toward a Flexible, Sustainable, and Ecological System

Goran V. Anđeković

Abstract

In the context of global challenges and the rapid development of digital technologies, the question of the future of dwelling has once again gained significance and relevance. This paper critically raises the following questions: why it is important to discuss this topic today; what the position of contemporary architects is within this context; what kinds of apartments we live in today and what kinds we will live in tomorrow and; whether we will have the capacity to shape them as a common good rather than merely as a market commodity. By reflecting on valuable experiences and lessons from the past, as well as on a present dominated by the uncritical application of market principles, the question of dwelling requires a thorough (re)thinking and the establishment of a new value system – one that includes flexibility, sustainability, and ecological responsibility. The aim of this paper is to open a broader front for discussion within multidisciplinary circles through a critical examination of the past and present, the recognition of existing challenges, and the anticipation of possible and desirable directions for (re)thinking dwelling.

Key words: *Dwelling, Flexibility, Sustainability, Ecological Responsibility, Value, System*



¹
An example of a faceless and uninspired dwelling space with generic architecture, Belgrade Waterfront, Belgrade, Serbia (Photo by Goran V. Anđeković, 2025)

At the very outset, a fundamental question arises: why is it important today to engage the future of dwelling? In the context of global challenges – accelerated and invasive urbanization; the depletion of essential resources (water, air, and land); climate change; migration flows; wars; the global COVID-19 pandemic; permanent financial, political, and social crises – combined with the rapid development of digital technologies – development of AI; transformations in work modes; smart housing; and other “intelligent” systems – the issue of the (future of) dwelling once again gains significance and relevance.

Dwelling, as an important theme for the future, can no longer be regarded merely as a technical matter of providing “a roof over one’s head,” demanded “at a click of a button” by a techno-fetishistic user, nor as the narrow market valuation of an apartment as a commodity. Unlike other architectural typologies, dwelling reveals a distinct, unbroken, and life-sustaining continuity throughout the history of human civilization. It both reflects and accompanies its positive and negative selves – from the earliest simple shelters in prehistoric times to the complex multi-family housing structures in the contemporary age.

For these reasons, dwelling demands a thorough (re)thinking and the establishment of a new value system – one that integrates flexibility, sustainability, and ecological responsibility. The aim is not to provide instant solutions or rigidly define principles for the future development of dwelling but rather to critically assess both the past and the present, identify existing challenges, and anticipate possible and desirable directions for (re)thinking dwelling development in the near and more distant future. Equally importantly, this approach seeks to open a broader front for the discussion within multidisciplinary circles.

The first step toward this goal lies in an essential re-setting of this phenomenon in theory and practice – primarily because of its direct impact on (co-)shaping the quality of life of the individual in the narrower sense and the collective (co-)existence of the community in the broader sense. From this perspective, dwelling must henceforth be approached as a unified living organism, understood through a multidisciplinary lens, and capable of

responding to the aforementioned global challenges. Within this context, a subsequent key question arises: what is the position of contemporary architects regarding the (future of) dwelling in the face of these global challenges?

It appears that contemporary architects have forgotten the lessons and experiences of the past as well as the accumulated knowledge of their predecessors and have – by following the path of least resistance – uncritically embraced the market formula “square meter times euro.” Paradoxically, nearly a century ago, a different and, from today’s perspective – despite justified critiques of Functionalism – significantly more humane formula prevailed: “function times economy.”¹ Through the principle of maximizing the utility of minimal available dwelling space, this formula gave rise to the so-called “Apartment for Existential Minimum” – a model realized in practice which, despite its shortcomings, nonetheless achieved a substantive quality.

The consequences of the uncritical application of the market formula are evident in the housing stock of contemporary cities worldwide: the faceless and uninspired dwelling space of generic architecture, perceived by the general public as “concretization,” by conscientious experts as the creation of urban heat islands, and by political actors as a sign of economic progress (Fig. 1). In reality, however, this represents the most costly use of a limited resource in the long term.

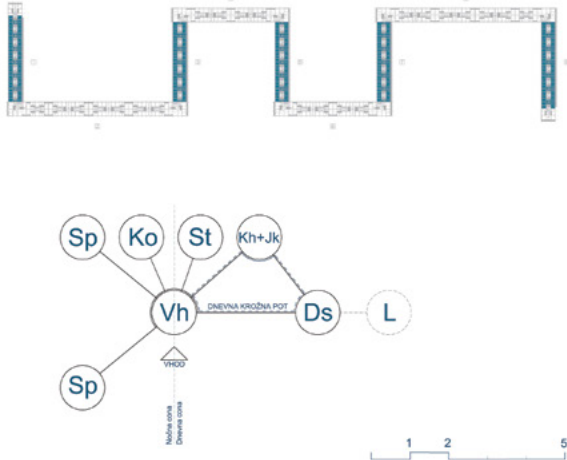
At the level of multi-family housing blocks and individual apartment units, contemporary architects often neglect the universal values of well-designed and executed dwelling spaces: from the basic human needs articulated in Maslow’s hierarchy to the empirically and practically verified minimal and optimal thresholds of a functional program. Justifying this neglect by appealing to the market formula as an unavoidable reality and imposed constraint within the complex process of design and construction is, at the very least, unconvincing.

¹ Schnaidt, 1965: 95.

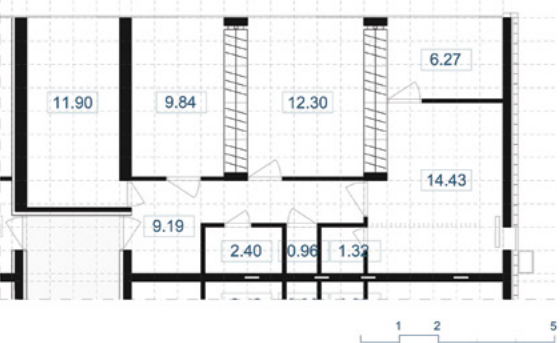
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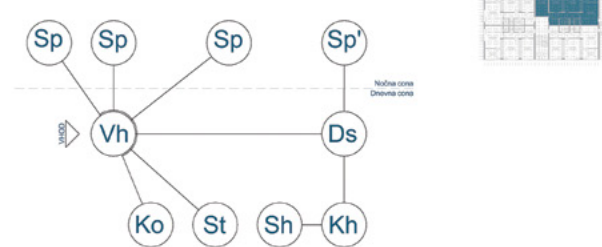
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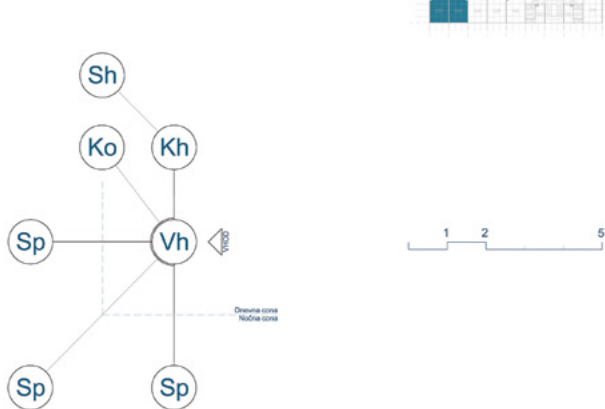
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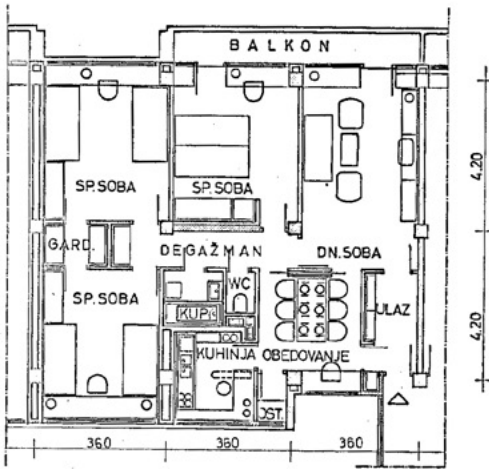
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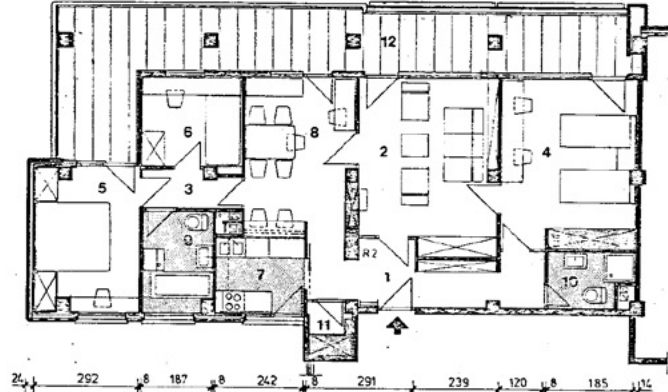
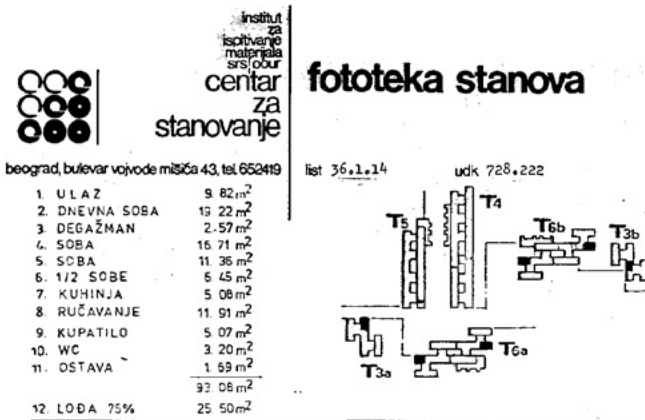
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2
Examples of inventive spatial-functional solutions in Belgrade
(L. Lenarčič, M. Mitić, I. Petrović, and M. Čanak, Block 21, New Belgrade, 1960–66),
Ljubljana (D. Fürst, housing towers, Bežigrad, 1965–66),
and Zagreb (B. Budimirov, Ž. Solar, D. Stilinović, and Đ. Mirković, Borongaj, 1961–63)
(Graphic representation by Goran V. Anđelković, 2018)



lokacija
projektant
izvođač
konstruktivni sistem
godina izgradnje
spratnost
izvor priloga
napomena
BLOK 29, NOVI BEOGRAD
ARH. M. MITIĆ, ARH. M. ČANAK
GP. "RAD"
IMS SISTEM
1969–1974
P + 6
PROJEKTA DOKUMENTACIJA
STAN NA SPRATU



lokacija
projektant
izvođač
konstruktivni sistem
godina izgradnje
spratnost
izvor priloga
napomena
BLOK 19a, NOVI BEOGRAD
ARH. M. LOJANICA, P. CAGIĆ, B. JOVANOVIĆ
GP. "RATKO MITROVIĆ"
SKELET
1978 –
P + 6, P + 7
KATALOG STANOVA

3
Examples of the concepts of expanded communication (M. Mitić and M. Čanak, Block 29, New Belgrade, 1967–1975)
and the division of the apartment into two centers (M. Lojanica, P. Cagić, B. Jovanović, and R. Marić, Block 19a, New Belgrade, 1975–82)
(Graphic representation by the Center for Housing)

By way of reminder, housing regulations in socialist Yugoslavia prescribed the inclusion of an additional bed in the living room. This externally imposed limitation was transformed by architects in three important centers of architectural education – Belgrade, Ljubljana, and Zagreb – into an advantage, generating new value through bold and inventive spatial-functional solutions. From today's perspective, these experiments remain highly relevant and valuable.²

- 1 In Belgrade (Belgrade housing school), two models first emerged – the creation of a secondary living area centered around the dining table within Aalto's kitchen (Fig. 2), and the concept of expanded communication (Fig. 3) as a new focal point of the apartment's living zone – followed by a third model that introduced the division of the apartment into two centers (Fig. 3);
- 2 In Ljubljana, the living room was formally retained as a half-room, with the option of its integration with the kitchen and dining space into a unified living area during use (Fig. 2);
- 3 In Zagreb, architects established an equivalence between the living room and the bedroom (Fig. 2).

All three design responses provided flexible apartment solutions for their time, which could be adapted to the changing needs and demands of users over time, and have proven to be operative and functional up to the present day.

2 Anđelković, 2018: 59–60, 354, 369, 399, 429–431, 435–436, 446–447, 454–455, 508–509.

This brings us back to a central question: in what kind of apartments do we live today?

In contrast to the period of socialist Yugoslavia, when architectural practice in the dwelling field was regularly accompanied by continuous, fact-based, and argumentatively grounded research (Fig. 4) – it is worth recalling two seminal studies: *Family, Apartment, and Settlement: A Survey Research of 195 Apartments in Savsko naselje in Ljubljana* (1988) by France Ivanšek with collaborators from the Urban Planning Institute of Slovenia, and *Quality and Characteristics of Dwelling in Block 21 in New Belgrade* (1976), conducted by a multidisciplinary team from the Center of Housing (within the Institute for Testing of Materials) – today, one can only diagnose the many problems in the design and construction of contemporary apartments.

The strong pressure from investors to maximize urban planning parameters combined with the weak institutional response inevitably results in the declining quality of dwelling space, poor architectural production, and the unjustifiable consumption of a limited land resource. Instead of the once-guiding credo "Form Follows Function,"³ we now witness its sharpest inversion: "Form Follows Profit."⁴ Paradoxically, most contemporary apartments fail to embody even the basic values once proclaimed as es-

3 Sullivan, 1896: 403–409.

5 It is derived from a statement by Richard Rogers given in an interview with *The Times* on February 13, 1991: "Form follows profit is the aesthetic principle of our times."



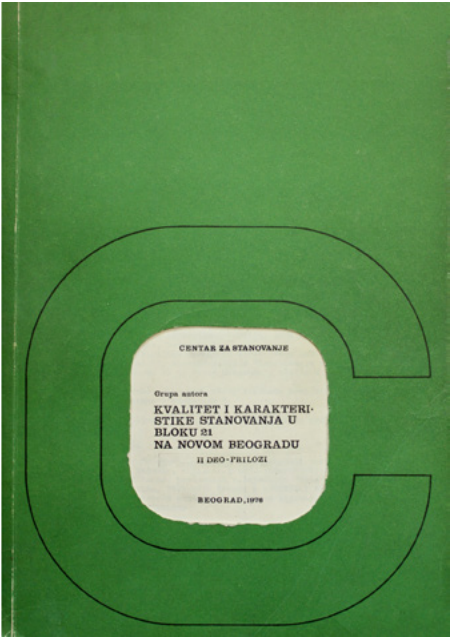
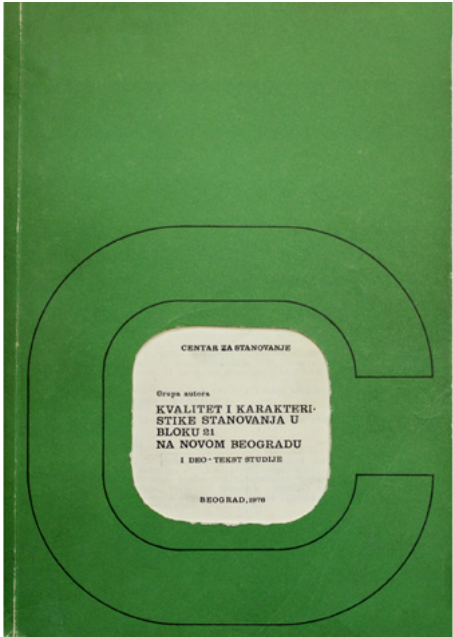
4
Studies Family, Apartment, and Settlement: A Survey Research of 195 Apartments in Savsko naselje in Ljubljana (1988) and Quality and Characteristics of Dwelling in Block 21 in New Belgrade (1976)

sential to dwelling and human well-being: Le soleil, L'espace et Le Verdre.⁵ The apartments are no longer created to satisfy fundamental human needs and to achieve their use value as a matter of public interest, but rather as commodities on the real estate market guided by the profit logic and the investor's particular interests. In today's design practice, apartments without direct access to natural ventilation and daylight are becoming increasingly common – a problem that modernist architects confronted a century ago. This acute issue became especially evident during the global COVID-19 lockdowns, when residents experienced firsthand the shortcomings of their contemporary living spaces.

Returning to the cases of Belgrade, Ljubljana, and Zagreb: what do they also have in common? Their respective innovative structural systems – IMS “Žeželj” in Belgrade (1957), “TERM” in Ljubljana (1960), and “Jugomont” in Zagreb (1959).⁶ Despite the strengths and weaknesses of each, as well as their contextual anachronisms, all three share a clear, open, logical, and organically structured system. The common denominator is, in fact, the word “system”. This key term leads us back to reading the doctoral dissertation of architect Ivan Petrović, *Systems and Design: Decisions Between Reality and Conjecture* (1972), and to the articulation of value positions within an integrated new system for the future of dwelling.

6 Three values according to Le Corbusier. See: Perović, 2000: 38.

6 Andelković, 2018: 134–141.



Beyond flexibility, two additional values equally vital for the community must be integrated: sustainability and ecological responsibility. These two values are, to varying degrees, present in contemporary practice – through energy efficiency, renewable energy sources, the use of local materials, green roofs, and similar technological solutions. Yet their true potential often remains underutilized and at times trivialized by improvised solutions stemming from vague or inconsistently formulated regulations. In the pursuit of responding to challenges, the most elementary premise of these values is all too easily overlooked in the conceptual design phase of housing settlements: the essential connection between the apartment as constructed space and its immediate surroundings as a natural environment (Fig. 5) – erasing the boundary between outside and inside and articulating fluid space.⁷

In place of a conclusion – an open question: what kinds of apartments will we live in tomorrow, and will we have the capacity to shape them as a common good rather than merely as a commodity of the market?

7 It refers to the concept of Ludwig Mies van der Rohe that was applied in post-war housing architecture in Belgrade. See: Frempton, 2004: 161–166.



5
An example of an experiential model of dwelling in the future, Cerak Vinogradi (D. Marušić, M. Marušić, and N. Borovnica, 1978–87), Belgrade, Serbia (Photo by Goran V. Andelković, 2025)

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Slikovni viri

Fig 1: An example of a faceless and uninspired dwelling space with generic architecture, Belgrade Waterfront, Belgrade, Serbia. Photo by Goran V. Andelković, 2025.
Slika 1: Primer brezosebnega in nenavdihujočega bivalnega prostora z generično arhitekturo, Beograd na vodi, Beograd, Srbija. Foto: Goran V. Andelković, 2025.

Fig 2: Examples of inventive spatial-functional solutions in Belgrade (L. Lenarčič, M. Mitić, I. Petrović, and M. Čanak, Block 21, New Belgrade, 1960–66), Ljubljana (D. Fürst, housing towers, Bežigrad, 1965–66), and Zagreb (B. Budimirov, Ž. Solar, D. Stilinović, and Đ. Mirković, Borongaj, 1961–63). Source: Andelković, 2018: 574, 583, 585.
Slika 2: Primeri inventivnih prostorskih in funkcionalnih rešitev v Beogradu (L. Lenarčič, M. Mitić, I. Petrović in M. Čanak, stavbni otok 21, Novi Beograd, 1960–66), Ljubljani (D. Fürst, stanovanjski stolpiči, Bežigrad, 1965–66) in Zagrebu (B. Budimirov, Ž. Solar, D. Stilinović in Đ. Mirković, Borongaj, 1961–63). Vir: Andelković, 2018: 574, 583, 585.

Fig 3: Examples of the concepts of expanded communication (M. Mitić and M. Čanak, Block 29, New Belgrade, 1967–1975) and the division of the apartment into two centers (M. Lojanica, P. Cagić, B. Jovanović, and R. Marić, Block 19a, New Belgrade, 1975–82). Graphic documentation of the Center for Housing in the author's own archive.
Slika 3: Dva primera zasnova: razširjena komunikacija (M. Mitić in M. Čanak, stavbni otok 29, Novi Beograd, 1967–1975) in stanovanje z dvema središčema (M. Lojanica, P. Cagić, B. Jovanović in R. Marić, stavbni otok 19a, Novi Beograd, 1975–82). Grafična dokumentacija Centra za stanovanje v avtorjevem zasebnem arhivu.

Fig 4: Studies Family, Apartment, and Settlement: A Survey Research of 195 Apartments in Savsko naselje in Ljubljana (1988) and Quality and Characteristics of Dwelling in Block 21 in New Belgrade (1976).
Slika 4: Študiji Družina, stanovanje in naselje: anketna raziskava 195 stanovanj v Savskem naselju v Ljubljani (1988) in Kakovost in značilnosti bivanja v stavbnem otoku 21 v Novem Beogradu (1976).

Fig 5: An example of an experiential model of dwelling in the future, Cerak Vinogradi (D. Marušić, M. Marušić, and N. Borovnica, 1978–87), Belgrade, Serbia. Photo by Goran V. Andelković, 2025.
Slika 5: Primer izkustvenega modela bivanja v prihodnosti, Cerak Vinogradi (D. Marušić, M. Marušić in N. Borovnica, 1978–87), Beograd, Srbija. Foto: Goran V. Andelković, 2025.