

KAROLINA SKALSKA*

“EXISTENZMINIMUM” – THE RISE OF AN IDEA

„EXISTENZMINIMUM” – NARODZINY IDEI

Abstract

In this article the history of research on minimal living space is presented. The question of a minimum space, accessible to a low-income dweller, providing him with a worthy life, started to be an issue in the first half of the 20th century. By then European cities were not able to cope with an inflow of new dwellers. The issues were of such importance that they became the theme of one of the International Congresses of Modern Architecture (CIAM), the research was undertaken by such architects as, e.g. Le Corbusier, Ernst May, Alexander Klein or the writer and art critic Karel Teige. The aim of the article is to draw attention to the practical aspect of this research in the context of study of the minimal space. In the era of a contemporary phenomenon of decreasing the living size area, by providing at the same time the comfort, old architectural patterns can be a significant point of reference on the way to introducing new solutions.

Keywords: ‘Existenzminimum’, CIAM, minimum apartment, minimum space, microapartment

Streszczenie

W artykule zaprezentowano historię początków badań nad minimalną przestrzenią potrzebną do mieszkania.

Problem przestrzeni minimum, dostępnej dla masowego odbiorcy, zapewniającej mu godne życie, zaczął być gruntownie badany w pierwszej połowie XX wieku, kiedy to miasta europejskie nie były w stanie sprostać napływowi nowych mieszkańców. Zagadnienia te były na tyle istotne, iż stały się tematem przewodnim jednego z Międzynarodowych Kongresów Architektury Nowoczesnej (CIAM), a badaniom i studiom poświęcili się tacy architekci i artyści jak Le Corbusier, Ernst May, Alexander Klein czy pisarz i krytyk sztuki Karel Teige.

Celem artykułu jest zwrócenie uwagi na przydatność tychże badań w kontekście dzisiejszych badań nad przestrzenią minimum. W dobie współczesnego zjawiska

* Msc. Eng. Arch. Karolina Skalska, Department of Architecture of the Services and Housing, Faculty of Architecture, Poznan University of Technology.

nieustannego zmniejszania rozmiaru przestrzeni potrzebnej do mieszkania, przy jednoczesnym zapewnieniu komfortu jej mieszkańcom, stare wzorce architektoniczne mogą stanowić istotny punkt odniesienia na drodze do wprowadzania nowych rozwiązań.

Słowa kluczowe: Existenzminimum, CIAM, mieszkanie minimum, przestrzeń minimum, mikroapartamentowiec

1. INTRODUCTION

One's own space needed for living is an integral element of human life. It can be observed that in urban areas due to the numerous limitations, including area, economy or law, it is being constantly miniaturized or functionally minimized.

In the 20th century the problem of housing intended for the low-income dweller became one of the most urgent issues to be resolved¹ – the situation is unchanged to this day, e.g. in Poland^{2 3}. The idea of the **minimum space**, providing men with decent living conditions began to be studied before the First World War. However, it was after the war that these studies were intensified.

2. HISTORICAL OVERVIEW

The Industrial Revolution resulted in the overcrowding of European cities in the 19th century. An example would be Berlin, where the population grew quickly from 170 thousand residents to nearly two million. Two years after the end of World War Berlin was one of the most populated cities in the western world⁴.

The beginning of research on solutions aimed at improving the living conditions in apartments designed for the low-income dweller had its origin in the days before the First World War. It was undertaken by Paul Wolf and Martin Wagner and additionally influenced by the activity of housing cooperatives in the Netherlands^{5 6}. But it was only after the First World War when an attempt was made to change this situation by introducing systemic solutions⁷.

¹ K. Teige, *The Minimum Dwelling*, The MIT Press, Cambridge, Massachusetts, 2002, p. 107.

² Eksperci: w Polsce brak kompleksowego programu budowy mieszkań (http://wyborcza.pl/1,91446,17211503,Eksperci_w_Polsce_brak_kompleksowego_programu_budowy.html).

³ Problemy mieszkaniowe Polaków. Izba Projektowania Budowlanego. (<http://www.ipb.org.pl/?p=516>).

⁴ Bevilacqua M.G., *Alexander Klein and the Existenzminimum: A 'Scientific' Approach to Design Techniques*, Nexus Network Journal, 13 (2011) 297–313, p. 298.

⁵ Paul Wolf (http://saebi.isgv.de/biografie/Paul_Wolf_%281879-1957%29).

⁶ 100 Jahre Stadtparkkolonie (<http://www.wzonline.de/nachrichten/lokal/artikel/100-jahre-stadtparkkolonie.html>).

⁷ M. G. Bevilacqua, *Alexander Klein and the Existenzminimum: A 'Scientific' Approach to Design Techniques*, Nexus Network Journal, 13 (2011) 297–313, p. 297.

After the war, the lack of housing was such a widespread phenomenon that the International Congress of Housing (which was held in Paris in 1928) defined it as one of the most pressing social problems to be solved⁸. The large disparity between an average salary of workers, and costs of house rental, meant that one dwelling was often inhabited by two or more families⁹.

The natural consequence of aiming to increase the availability of housing for a low-income dweller was to simplify the construction process, but also to create design standards referring to the functional layout of an apartment. Simplification of the construction process (simplicity of design, availability of materials) was supposed to depend among other things on the linkage between the housing and industrial production.

In 1929, on the initiative of Ernst May, the second International Congress of Modern Architecture (CIAM) was held in Frankfurt. It was dedicated to the idea of 'Das Existenzminimum' (Minimum of Existence). During the meeting such typologies of the minimum space were discussed which could be an answer to the needs of the average dweller¹⁰. 130 architects from different countries participated in the congress, including Le Corbusier, Josef Frank, Hugo Häring and Szymon Syrkus, which may indicate how wide the interest in the subject was¹¹.

Research on the minimum space required for a dwelling also involved restructuring society. It was influenced by changing life conditions, which took place in most households, e.g. the lack of house servants, change of family structure (many men were killed during the war) and birth reduction. In Frankfurt, Berlin and Hamburg numerous settlements (Siedlungen) were raised. They became the realization of the idea of rational housing. In 1926, Walter Gropius and Ernst May obtained funds to build low-cost housing, which enabled further research on standardization and rationalization of construction. In most of them the idea of the Garden City Movement was continued¹².

One of the most famous examples of rational settlements is the Römerstadt housing estate in Frankfurt, built in 1927–28. More than 1,200 apartments were furnished according to the latest standards: with living room, bathroom and a rationally planned kitchen (the Frankfurt kitchen)¹³.

An important contribution to the study of the minimum space was made by Alexander Klein, an architect working in the late 1920's and 30's in Berlin, who studied the typology

⁸ H. Syrkus, *Ku idei osiedla społecznego 1925–1975*, Polskie Wydawnictwo Naukowe, Warszawa 1976, p. 70.

⁹ M.G. Bevilacqua, *Alexander Klein and the Existenzminimum: A 'Scientific' Approach to Design Techniques*, Nexus Network Journal, 13 (2011) 297–313, p. 298.

¹⁰ S. Syrkus, *Międzynarodowy Kongres Architektury Nowoczesnej*. Mieszkanie, nr 9 (3), listopad 1929, „Rój”, Warszawa, p. 16.

¹¹ E. Mumford, *The CIAM Discourse on Urbanism*, The MIT Press, Cambridge, Massachusetts, 2002, p. 27.

¹² *Ibidem*, p. 29.

¹³ Siedlung Römerstadt. Ernst May Gesellschaft (<http://ernst-may-gesellschaft.de/fileadmin/Redakteure/Seiten%20Anlagen/DNF/Wohnsiedlungen/Roemerstadt/RoemerstadtA4.pdf>).

of a minimum house based on the so-called 'score method' after the First World War¹⁴. Klein took into account several factors, which aimed to make the test method objective. The factors were the so-called: *Betteffekt* (the bed effect) – the ratio between the gross floor area of the house and the number of beds; *Nutzeffekt* (the use effect) – the ratio between the area used and the gross floor area of the house; and *Wohneffekt* (the housing effect) – the ratio between the area of the living room and bedroom and the gross floor area of the house¹⁵. The results of his work, called *Kleinwohnungen*, were presented at the International Congress of Housing in Paris, in 1928.

Four years later, in 1932, a book *Nejmenší byt* (*The Minimum Dwelling*) was published. It was written by the Czech avant-garde artist, critic and writer Karel Teige, who defined a minimum dwelling not as a smaller version of a typical dwelling, but a one of a new type – based on low-budget assumptions. It would not be a consequence of quality reduction, but a result of rationalization and industrialization of the production process, mainly by application of standardization and mass production¹⁶.

The housing situation in interwar Poland did not seem to be better than in other European countries. Approximately twenty thousand homeless were registered in Warsaw, but it is estimated that there were twice as many¹⁷. A large contribution to the development of social housing was made by Teodor Toeplitz, the co-founder (along with B. Bierut, J. Hempel, M. Orsetti, A. Pruchnik, S. Tołwiński, S. Szwalbe) of the Warsaw Housing Cooperative (Warszawska Spółdzielnia Mieszkaniowa)¹⁸. In the monthly magazine 'Dom, osiedle, mieszkanie' he presented a report of the Warsaw exhibition *Mieszkanie Najmniejsze* (The Smallest Dwelling), showing how significant the interest in those issues was back then¹⁹. The exhibition was brought from Frankfurt by a team of Praesens architects and presented, among others, the work of Le Corbusier, P. Jeanneret, W. Gropius, E. May. At the exhibition, for the first time in Poland, models of different types of curtain walls or installation devices suitable for small housing units were shown²⁰. In Żoliborz subsequent colonies of housing for the working class were raised and in Rakowiec (Warsaw) a housing estate by Szymon and Helena Syrkus was completed in 1935. In this estate the designers influenced by the observations of some older colonies applied significant changes and restrictions in the plumbing and heating systems.

Theoretical studies and the construction of new settlements according to the objectives of CIAM were suspended as World War II started.

¹⁴ M. G. Bevilacqua, Alexander Klein and the Existenzminimum: A 'Scientific' Approach to Design Techniques, Nexus Network Journal, 13 (2011) 297–313, p. 297.

¹⁵ *Ibidem*, p. 304.

¹⁶ K. Teige, *The Minimum Dwelling*, The MIT Press, Cambridge, Massachusetts, 2002, p. 32.

¹⁷ F. Springer, *13 Pięter*, Wydawnictwo Czarne, Wołowiec, 2015, p. 15.

¹⁸ Warszawska Spółdzielnia Mieszkaniowa (<http://wsm.pl/index.php/o-nas/historia>).

¹⁹ T. Toeplitz, *Bilans wystawy. Z wystawy „Mieszkanie Najmniejsze”*, Dom, osiedle, mieszkanie, rok II, kwiecień 1930, nr 4, p. 2–3.

²⁰ H. Syrkus, *Ku idei osiedla społecznego 1925–1975*, Polskie Wydawnictwo Naukowe, Warszawa 1976, p. 95.

After the end of the war the assumptions made by CIAM were implemented in the destroyed Europe with an increased intensity, and the demands of the Athens Charter came into reality as i.a. the large-scale housing estates built of prefabricated concrete. These activities were aimed at providing the working class with the life at a similar level as that of the middle-class. The pre-war idea of ‘Existenzminimum’ became a universal space for exhibiting dining and living room furniture, living room, functioning of Frankfurt kitchen, washing machine, refrigerator, and eventually a TV set²¹.

3. MINIMUM SPACE IN TODAY’S POLAND

Today’s discourse upon the minimum space needed for living returns in the form of so-called microapartments²². A small apartment or a room for rent are popular among buyers and tenants²³. Causes of shrinking of space in apartments on the primary market differ from those of the 20th century, being now a result of declining ability to finance investments by Polish people. The compact fashion is becoming a popular way to increase the availability of housing. According to statistics from the Central Statistical Office the floor area of new dwellings has been decreasing constantly since 2008 by an average of almost 2.5 m² per year, and it is now already less than 60 m²²⁴.

Microapartments increasingly form multifunctional complexes, which are supposed to create an attractive space for residents or tenants²⁵. Therefore, in one of them – Wrocław Starter II, its investor plans to build such a complex – with shops, fitness centre, laundry facilities, and an electric car rental²⁶. A typical microapartment area varies from a dozen to two dozen square metres. The price of a SmART apartment in Poznań oscillates around 7200 PLN (+ VAT) / m² and in the Warsaw apartment WolskaKwadrat it is approximately 10 000 PLN / 1m² (in the case of a one-room apartment with the area of 14.5 m²)^{27 28}. The average salary (according to Central Statistical Office) in the national economy in 2015 amounted to approximately 3900 PLN – it may be assumed, therefore, that these prices are not the ones that would satisfy a customer with low or average income²⁹. Still though it can be considered that apartments with an area of a dozen square metres can be both an attractive acquisition and a satisfactory living space for many users.

²¹ Maximum Life in Minimum Space (<http://movingcities.org/bertdemuynck/on-china/maximum-life/>).

²² Mikropartmentowce – nowy trend, czy smutna konieczność? (<https://rynekpierwotny.pl/wiadomosci-mieszkaniowe/mikroapartmentowce-nowy-trend-czy-smutna-koniecznosc/1099/>).

²³ J. Banaś, Sprzedali wszystkie mikroapartamenty. Mają od 12 m² do... (http://wroclaw.wyborcza.pl/wroclaw/1,95327,15566040,Sprzedali_wszystkie_mikroapartamenty_Maja_od_12_m.html).

²⁴ Mieszkania się kurczą – czy jesteśmy skazani na 11 m²? (<https://www.wprost.pl/377959/Mieszkania-sie-kurcza-czy-jestesmy-skazani-na-11-m2>).

²⁵ Małe mieszkanie na start (<http://www.rp.pl/Kupno-i-sprzedaz/308309984-Male-mieszkanie-na-start.html#ap-2>).

²⁶ Starter (<http://www.starter.net.pl/pl/>).

²⁷ Projekt smART (www.smartapartamenty.pl).

²⁸ WolskaKwadrat (<http://wolskakwadrat.pl/>).

²⁹ Przeciętne wynagrodzenie. Główny Urząd Statystyczny (<http://stat.gov.pl/sygnalne/komunikaty-i-obwieszczenia/18,2015,kategoria.html>).

4. CONCLUSION

It must be understood that within the last hundred years the interest in the idea of minimum dwelling arose for various reasons. In the 1920's and 30's, a working class family owning their own small flat often meant significant improvement in living conditions. Today, in turn, it might be a necessity, associated with a decrease in the standard of living. However, it seems that there is still a lot to be said on the issue of modern solutions for the minimum living space. Nearly one hundred years old rational housing solutions, can serve as a starting point for today's research into the minimum space and for implementing new solutions, particularly accessible to an average dweller. With no doubt, nowadays we are dealing with a different user, family structure, and a different social and economic context – hence the further examination of these issues seems to be, as it was once, of great value.

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