

Marek Czapelski

INSTITUTE OF ART HISTORY, UNIVERSITY OF WARSAW

The Memory of Opulence and the Freedom of a Pauper: The Construction-material Discourse in the Polish Construction Industry in the Period of the Thaw

An endless assortment of tiles and floor terracotta in all hues with a full range of gouges, plinths and shaped elements of all types. Corset tiles, small-size floor tiles and mosaics, terrazzo slabs and poured terrazzo in all colours and variants. Linoleum, rubber, cork slabs for flooring, screed blocks or poured screed. Thermal and acoustic insulation boards made of cork, straw, sugar cane. A full assortment of ceramic hollow bricks for ceilings and for walls, clinker bricks and cladding tiles, high-quality grout in dozens of granulations and hundreds of hues. Dozens of insulation materials, rolls of waterproofed jute, rolls of asphalt roofing, asphalt adhesives and chemical substances. A full assortment of rolled iron, woven meshes, expanded metal and non-ferrous metal sheets in all gauges and patterns. Radiators of various shapes and sizes, boilers in all types, passenger elevators by various manufacturers to choose from.

Jerzy Wierzbicki, 1956¹

This emotional enumeration of construction materials available on the Polish market in the inter-war period, provided by Jerzy Wierzbicki (1906–1994), remains an eloquent testimony to the sense of a bitter loss that the middle and older generations of architects must have felt in the 1950s. The above notes – which were published in the period of the political Thaw – constituted a metonymic criticism of the conditions in which architecture was practised in the middle of that decade. Sounding like a medley from the pre-war adverts of trading companies, these phrases unmistakably questioned the trend of the day, advocating cost-cutting in terms of construction materials and general economy in the building industry. This trend had been launched as part of the ideological drive towards Socialist Realist aesthetics and until then it had never been publicly unquestioned.²

1 J. Wierzbicki, "Podnieść wykonawstwo" [To improve workmanship], *Architektura*, 1956, 10, no. 2, p. 30.

2 Cf. M. Czapelski, "Towards a Socialist Architecture: Architectural Exhibitions at the Zachęta in the Years 1950–1955", *Ikonotheka*, 2016, 26, pp. 36–37.

In a broader perspective, talking about the former wealth of deluxe construction materials and related fancy goods undermined the very foundations of the propagandistic effort to present the recently constructed edifices as admirable in the light of “the full splendour of the organisation system on a contemporary construction site, the splendour that lies in the potential of rapid or streamlined construction etc.”.³ In the Stalinist era, from 1949 to 1953, *Architektura*, the main periodical of the profession, clearly treated the issue of construction materials and technological conditions of the architects’ work as one of secondary importance.⁴ The dearth of texts that focused on the issues of construction materials and technology attested to the periodical’s Socialist Realist propriety no less than its ideological lucubrations.

Yet Wierzbicki’s words had another, more immediate context as well: the ongoing turn towards construction materials as a topic of debate was, alongside the issue of prefabrication, one of the chief topics of technological and architectural discourse of the mid-1950s.⁵

This discourse emerged soon after Stalin’s death. Economy in design and construction was far more strongly emphasised than in the preceding years as a priority, as testified by the resolutions of the 9th Plenum of the Central Committee of the Polish United Workers’ Party (29 October 1953) held before the 2nd Congress of the Party.⁶ The last-minute addition of an architectural section into the programme of the Polish Academy of Sciences session devoted to the issue of construction materials was an eloquent symptom of the ongoing reassessment of approaches.⁷ Freed from the ideological pressure of Socialist Realism, architects were expected to join construction engineers in implementing the new cost-cutting agenda. Reports from related debates held at that time in the Soviet Union reflect the climate of the era; for instance, during the 2nd Scientific and Technological Council of Moscow Build-

3 J. Hryniewiecki, “Materiały budowlane” [Building materials], *Architektura*, 1951, 5, pp. 184–185.

4 The issue of building materials was discussed at the scholarly session of the Polish Association of Construction Engineers and Technicians (Polski Związek Inżynierów i Techników Budownictwa, PZITB): *Materiały nadesłane na zjazd naukowy PZITB w Gdańsku 1–4 grudnia 1949 r.* [Materials sent for the scholarly session of PZITB in Gdańsk, 1–4 Dec. 1949], part 2, fasc. 1: *Walka o materiały budowlane, ich produkcję i właściwe zastosowanie. Walka o konstrukcję i formę w budownictwie* [A struggle for building materials, their production and proper use. A struggle for the structure and form in construction], Wydawnictwo Ministerstwa Budownictwa no. 37, Warsaw, 1949.

5 On prefabrication: M. Czapelski, “A House from a Factory: Polish Architects and Prefabricated Residential Housing in the 1950s”, *Ikonotheke*, 2013, 24, pp. 155–184.

6 J. Skrzekot, “Przed II zjazdem partii” [Before the 2nd Council of the Party], *Architektura*, 1954, 8, no. 1, pp. 1–2.

7 A session organised by the Civil Engineering Committee of the 4th Dept. of Technical Science, Polish Academy of Sciences (Komitet Inżynierii Lądowej Wydziału IV Nauk Technicznych PAN) took place on 27–30 June 1954. H. K. [Hieronim Karpowicz?], “Kronika. Materiały budowlane (sesja problemowa Polskiej Akademii Nauk)” [The chronicle. Construction materials (problem-focused session of the Polish Academy of Sciences)], *Architektura*, 1954, 8, no. 9, pp. 231–232.

ers it was pointed out that, in addition to introducing standardised designs, it was necessary to dispose of “traditional construction [...] in favour of an entirely new building technology, until now known only from [specialist] literature, making use of many hitherto unknown materials”.⁸

This declaration reflected the establishment’s undying hope – very typical from the mid-1950s onwards – that a *sui generis* philosophers’ stone, that is, a cheap and perfect construction material, would finally be discovered, thanks to which one of the most essential promises of the new political system, namely the ultimate “reduction of the housing deficit”, was to be finally fulfilled. This had been pledged as early as in 1944, in the very first programmatic document of the new government: the Manifesto of the Polish Committee of National Liberation. However, this much-awaited cheap and perfect construction material required advanced construction technologies involving the use of large pre-fabricated concrete blocks which, in turn, imposed the use of a centralised executive authority based large enterprises that could accomplish the government’s ultimate goal: to organise a universal construction effort. As a result of this venture, the general population would acquire living quarters in multi-family prefabricated blocks in housing estates.

In reality, however, the system of construction enterprises that evolved in Poland in the first decade of the People’s Republic of Poland was highly inadequate and inefficient. According to statistical data, in 1956 two-thirds of these enterprises showed a loss.⁹ Complaints against the ever-dwindling range of construction materials were a recurrent topic among architects.

The frustration engendered by this situation was one of the many factors which, taken together, darkened the atmosphere in the architectural milieu. This culminated in the famous council of architects in March 1956, where a verbal onslaught on the psychological and organisational ballast of Socialist Realism took place.¹⁰ The passage which opened this essay may be seen as a continuation of this healing process, one that was especially radical in its unmitigated eulogy of inter-war affluence.

Wierzbicki is, of course, only one of the many who gave voice to emotions that may have been catalysed in the period just before the Thaw by the discourse on

8 B. Kulesza, “Wnioski z narady budowniczych m. Moskwy dla architektów i budowniczych polskich” [Findings of the meeting of Moscow builders for Polish architects and builders], *Architektura*, 1954, 8, no. 10, pp. 233–234.

9 150 out of 225 enterprises, to be exact (66.7%). J. Chrumiński, “Przemysł w PRL – niewykorzystana szansa modernizacji” [Industry in the People’s Republic of Poland: a neglected opportunity for modernisation], in: *Modernizacja czy pozorna modernizacja. Społeczno-ekonomiczny bilans PRL 1944–1989* [Modernisation or illusory modernisation. Socio-economic assessment of the PRP 1944–1989], ed. J. Chrumiński, GAJT, Wrocław, 2010, p. 327. These results should, of course, be taken with a pinch of salt, as they partially resulted from state-imposed regulation of prices; it is, however, symptomatic that the construction industry achieved the worst results of all sectors.

10 A. Skalmowski, “‘Pierwsza szczerą naradą architektów’. Motywy, przebieg i konsekwencje Ogólnopolskiej Narady Architektów z 1956 r.” [“The first frank council of architects”. The causes, course and consequences of the National Council of Architects of 1956], *Polska* 44/45-1989, 2011, 11, pp. 181–190.

construction materials imposed by the authorities on the milieu. Another example that demonstrates the subversive potential of the authorities' cost-cutting actions intended to save the tottering edifice of the Stalinist centralised residential construction system is the issue of the so-called local- and waste-material construction.¹¹

The term itself may be viewed as a translation of the phrase *местные строительные материалы* found in the Soviet construction handbooks published in the 1930s and in the first years after the Second World War.¹² These texts informed how to use easily obtainable materials: reed, plaster, clay and rough stone, to replace those which were in short supply, such as timber or brick, in the construction of small, predominantly rural houses. The option of using similar materials was examined while the Six-Year Plan was being introduced, although the issue was abandoned in the years to come.¹³

An intensive campaign to promote the use of local and waste materials in construction began only in the second half of 1953 with the publication of a pertinent instruction by the Ministerial Department of Rural Architecture and a handbook by Franciszek Piaścik.¹⁴ But while the ministerial instruction justified the entire campaign solely in terms of the expected economic benefits nationwide, Piaścik also mentioned the character of rural architecture – its shorter amortisation period and the absence of any need for high-strength materials or advanced mechanisation of construction works. The durability of this essentially primitive architecture was accepted as the price to pay, so to speak, for a degree of freedom: Piaścik pointed out that “construction from local building materials would also refer to individual households”. In the climate of the era, still marked by a drive towards the collectivisation of rural areas, this was one of the first indications that the needs of the

11 This topic, although in a different approach, focused on the experience of provinciality in architecture, and in an abridged form, was discussed in my text “Na uboczu. ‘Miejscowe materiały budowlane’ w Polsce w latach 50. XX w.” [Away from the centre. “Local building materials” in Poland in the 1950s], in: *Regiony wyobraźni. Peryferyjność w kulturze XIX i XX wieku* [Regions of imagination. The peripheral quality in 19th- and 20th-century culture], ed. M. Lachowski, Warsaw, 2017, pp. 215–230.

12 Б. Скрамтаев, *Местные строительные материалы*, Москва–Ленинград 1933; *Справочник архитектора*, т. 8: *Конструкции гражданских зданий*, редактор-составитель Н. С. Дюрнбаум, Москва, 1946.

13 Cf. several papers given at the scholarly session of the Polish Association of Construction Engineers and Technicians in 1949, e.g. J. Chołodziński, *O renesans kamienia w nowym budownictwie Polski* [For the restitution of stone in new buildings in Poland] or M. Holsztyńska, *Wykorzystanie odpadków przemysłowych i produktów ubocznych o strukturze włóknistej w przemyśle materiałów budowlanych* [The use of industrial waste materials and production refuse materials having a fibre structure in construction-material industry], both published in: *Materiały nadesłane na zjazd naukowy PZITB w Gdańsku 1–4 grudnia 1949 r.*, op. cit.

14 *Instrukcja o stosowaniu materiałów miejscowych w budownictwie wiejskim* [Instruction on the use of local construction materials in rural areas], Warsaw, 1953; F. Piaścik, *Budownictwo wiejskie z materiałów miejscowych* [Construction from local materials in rural areas], Warsaw, 1953.

peasant community with respect to residential construction may actually be taken into consideration in official planning.¹⁵

Piaścik's text is also one of the few contemporary indications that the impact which building materials brought to bear on the architectural landscape of Polish countryside was, in fact, considered. Its author was aware that the utilisation of local materials on a mass scale, combined with economy in the use of timber and the introduction of simple prefabrication, would significantly alter the appearance of Polish villages. He was uneasy about the results of the proposed "indigent modernisation" of the provinces, as evidenced by his remarks regarding the need to preserve regional architectural forms by "maintaining appropriate proportions and traditional contours of edifices", as well as by his declaration – which was much in the spirit of early 20th-century national romanticism and smacked of wishful thinking – that "the use of local materials would emphasise the connection between architecture and the landscape".¹⁶ It must be pointed out that in 1938 Piaścik had declared that local materials played only a supplementary role in rural architecture and stated decisively that timber and brick were better.¹⁷ Thus, paradoxically, a text which constituted an element of a top-down propagandist campaign hints at a critical approach to blanket decisions regarding rural construction policies; such hints had been absent from earlier post-war publications.

The very fact that local material began to be promoted – which, in essence, meant that the authorities had officially sanctioned the citizens' independent attempts to alleviate their housing needs – to a certain extent undermined the typical Stalinist tendency to control each and every area of social endeavour. Concurrently, however, this approach showed that rural areas had a permanently marginal status in the doctrine of economic policy: peasants who were not members of production cooperatives had virtually no chance of obtaining a bank loan or an allotment of construction materials.

Actions promoting local materials, undertaken in 1953, were only an introduction to an intensive campaign that began under the 2nd Congress of the Polish United Workers' Party in the spring of 1954.¹⁸ A governmental resolution issued in April laid the ground for a new cost-cutting policy pertaining to the entire industry; the use of rough stone, cinder-and-limestone elements, lightweight concrete and clay in rural housing construction was an element of this policy.¹⁹ New guidelines for

15 F. Piaścik, *Budownictwo wiejskie*, p. 5.

16 Ibid, p. 6.

17 F. Piaścik, *Budownictwo mieszkaniowe na wsi* [Housing construction in rural areas], p. 37.

18 General principles of official policy on construction: *II Zjazd PZPR. Główne zadania gospodarcze dwóch ostatnich lat (1954–1955) Planu sześcioletniego. Referat wygłoszony dnia 13 marca 1954 r. przez towarzysza Hilarego Minca oraz Uchwała Zjazdu* [The 2nd Congress of the Polish United Workers' Party. Main tasks with regard to economy in the past two years (1954–1955) of the Six-Year Plan. Paper given on 13 March 1954 by Comrade Hilary Minc and the Resolution of the Congress], Warsaw, 1954.

19 Government Presidium Resolution no. 192 dated 10 April 1954 on economy in the use of materials in 1954 (M.P. 1954 no. A-42 item 626). Clay-based construction was reviewed in the

cooperative and individual construction, issued a month later (whose importance will be discussed further on), recommended the use of “substitute, waste and recycled materials, as well as local materials and prefabricates made thereof” (Fig. 1).²⁰

The above decisions may be considered a sign of the authorities’ far-reaching reassessment of the potential role of local materials in the reconstruction of the country. Previously, they had been treated as secondary, useful as a stop-gap measure, suitable only for rural areas, chiefly for the construction of outbuildings. Governmental resolutions raised their importance (at least declaratively) as a crucial component in the implementation of housing policies nationwide. In addition, official decisions meant that the typically Stalinist centralised course of transformations which took place in the production of construction materials was given a clearer counterbalance.

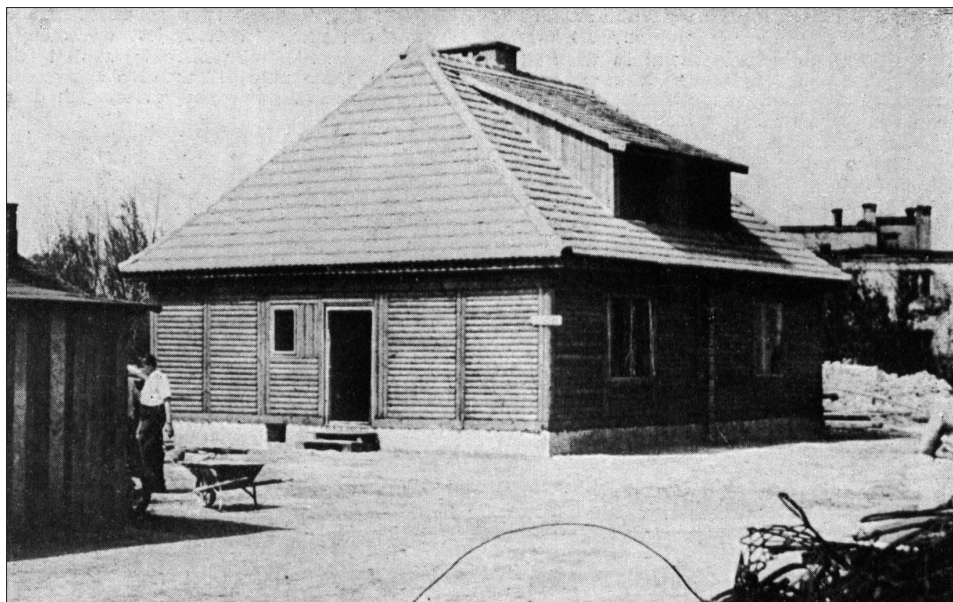


Fig. 1. A house made of log rolls, *Architektura*, 1954, no. 8, p. 274

unpublished Government Presidium Resolution no. 179 dated 10 April 1954 on increasing the scope of clay-based construction in the years 1954–1955 and assuring the proper development of this type of construction in the Five-Year Plan, instituting, among others, the Centre for Clay-Based Construction Research and Instruction in Cracow (D. Kupiec-Hyła, “Szansa dla budownictwa z gliny w warunkach rozwoju zrównoważonego budownictwa mieszkaniowego” [A chance for clay-based building in the developmental conditions of balanced housing construction], *Czasopismo Techniczne*, 2007, fasc. 3-A, p. 148).

- 20 Government Presidium Resolution no. 269 dated 8 May 1954 on housing cooperatives and the tasks of cooperatives regarding housing construction (M.P. 1954 no. 59 item 792). Government Presidium Resolution no. 270 dated 8 May 1954 on state aid for individual housing construction (M.P. 1954 no. 59 item 793).

This was because the government's forceful cost-cutting campaign occurred in the climate of ongoing de-Stalinisation: the last of the above-mentioned resolutions was proclaimed barely a month after the fundamental declaration of the Central Committee—that is, a condemnation of the opulence of Socialist Realist architecture.²¹ But the fact that in Poland the campaign promoting local materials in construction occurred in tandem with an increasing revision of Stalinism does not mean that it was thus elsewhere. In the USSR and East Germany clay and reed had been used as construction materials earlier, in conditions of wartime poverty (in fact, the *Murondins* houses, which Le Corbusier designed during the war, also made use of raw clay). Poland's nearly decade-long delay in introducing them brought the entire effort, indirectly, in for criticism for incompetence in reconstructing the war-ravaged country. In terms of the public image of the housing policies in Poland, promoting substitute construction materials was an unfortunate move, as it evoked associations with the widespread culture of substitute materials, which the entire society knew from the period of the Nazi occupation. The officially promoted provincial autarky became a clear sign that the socialist construction-material industry was permanently inefficient. As early as in August 1954 Mieczysław Mołdawa, one of the first authors to discuss local materials in *Architektura*, mentioned inefficient supply ("at many construction sites the tempo of the work is dictated by the supply of materials" – the mild tone of his criticism is typical of the early Thaw era), caused by the declining productivity in construction-material industry. Such shortages were to be remedied by a future technological breakthrough; but this still required "extensive [study] at research institutes and at experimental construction sites".²²

This, of course, signified a partial return to the idea of regionalism in the construction industry as advocated in the early post-war period by Kazimierz Dziewoński, who published the results of research he had conducted in England during the war.²³ In the case of local materials, however, this regionalism was of the most primitive kind; in effect, it meant that the investor was left to his own devices. The Polish construction-material industry was at an impasse; on the one hand, the range of products it churned out could not compete with the wealth of materials in the inter-war period (as shown by Wierzbicki's eulogy cited at the outset), while on the other hand it was still not efficient enough in using "poor-man's technologies".

Forgotten achievements from the earlier periods of history were supposed to bring salvation. In 1955, Mołdawa highlighted the need to study the architecture of

21 Resolution of the Central Committee of the Communist Party of the Soviet Union dated 4 Nov. 1955 "On the elimination of excesses in design and construction" (Постановление Центрального Комитета КПСС и Совета Министров СССР от 4 ноября 1955 года №1871 «Об устранении излишеств в проектировании и строительстве»).

22 M. Mołdawa, "Domki jednorodzinne z materiałów zastępczych i niedeficytowych" [Single-family houses from substitute and non-deficit materials], *Architektura*, 1954, 8, no. 11, p. 274.

23 K. Dziewoński, *Zasady przestrzennego kształtowania inwestycji podstawowych* [Principles of spatial formation of basic construction projects], Trzaska, Evert, Michalski, Warsaw, 1948, Wydawnictwo Ministerstwa Odbudowy no. 16, Główny Urząd Planowania Przestrzennego, Planowanie Przestrzenne, Studia Teoretyczne I.

the given region in order to discover the characteristics of well-known construction materials that were no longer utilised at the time, such as stone and plaster.²⁴ This does not come as a surprise; the recommendation to use local materials reflected the genuinely limited range of experiments conducted at research facilities. This is well exemplified by construction based on clay, where the necessary know-how had to be imported from East Germany.²⁵

Another characteristic aspect of the construction-material discourse of the mid 1950-s was the joining of two terms, “local and waste construction materials” in one formula. In essence, this formula put an equation mark between materials traditionally used in the given region (which in the period of national romanticism was visualised as an important element of the *genius loci*) with waste materials, the availability of which was caused simply by the government’s investment policy. All that these two types of materials had in common was that they could be obtained completely free of charge. It is quite obvious that the government intended to make them an important element of a cost-free *perpetuum mobile* supply for the construction industry. A regulation issued by the Council of Ministers in December 1955, which crowned the legislative effort of the period, gives a detailed definition which clearly indicates that, from the official point of view, these materials were equivalent: “Local raw materials and construction materials are, principally, the following: constructional dolomite, roof-tile slate, sandstone, quartzite, limestone rocks, glacial erratic stones, constructional gravel and sand, clays, tuffs, constructional peat, cinders, demolition materials, sawdust etc.”. An instruction was issued to produce standardised designs of houses “to be used in villages, housing estates and small towns” which would be adapted to these materials.²⁶

It must be pointed out that this was, in fact, an element of a broader issue of how to allay the consumers’ needs, that is, the plan to “produce commonly used articles from waste materials” recommended by another governmental regulation of the era.²⁷ Symptomatically, in comparison with earlier regulations referring to the same issue, this one gave the managers of various plants much greater freedom in determining what assortment of products would be manufactured by each facility.²⁸

24 M. Mołdawa, “Domki z materiałów zastępczych i niedeficytowych” [Houses from substitute and non-deficit materials], *Architektura*, 1955, 9, no. 3, pp. 68–70.

25 Results obtained in East Germany and Zygmunt Racięcki’s solutions were used in *Tymczasowe zasady wykonywania budynków z gliny* [Temporary principles of constructing clay structures], prepared by the Institute of Housing Construction, Warsaw, 1955, copied typescript. East German results were also the main reference point for Menander Łukaszewicz, *Nowoczesne budownictwo z gliny* [Modern clay-based construction], Warsaw, 1955.

26 Council of Ministers Resolution no. 1022 dated 17 Dec. 1955 r. on the use of local materials and raw materials in construction (M.P. 1955 no. 4 item 29).

27 Council of Ministers Resolution no. 352 dated 29 May 1954 on the institution of departments manufacturing articles of everyday use from waste materials in the key state-owned production facilities.

28 Earlier, production was regulated by the Government Presidium Resolution no. 219 dated 17 March 1951 on the production of articles of everyday use made from primary-production wastes as secondary-product turnout at state industry facilities, and the institution of the

Local and waste materials were closely connected with this ersatz of economic autonomy. They allowed for the use of simple construction methods intended for small teams of untrained builders ("we made the blocks ourselves, my missus and I, and we built the house ourselves"²⁹). They concretised conceptions contained in governmental resolutions regarding cooperative housing and individual residential construction, which had been proclaimed in May 1954.³⁰ Together with the decree on residential space in cooperative housing and single-family (i.e. detached/semi-detached) houses, which excluded newly constructed single-family houses and cooperative apartments from the state governance of residential spaces, these acts overturned the essentially unfavourable official policy practised towards these forms of housing in the earlier years of Stalinism.³¹ The most eloquent symbol of the earlier, centralistic logic of the process of transforming the organisation of housing construction was the Workers' Housing Estate Company, instituted in 1948 (Zakład Osiedli Robotniczych, ZOR; in fact, it was precisely in 1954 that this institution began to be reformed in the de-centralistic spirit)³². This logic, in which multi-family housing was almost the sole priority, was now discarded.

Housing construction based on local materials seemed to correspond to the spirit of those changes. As early as in 1943 Franciszek Piaścik, in the already cited study on the organisation of the future reconstruction of rural communities, stated that a fundamental role in that process would be played by regional construction cooperatives; their task would be to organise the manufacture of construction materials from locally available substances and to construct larger complexes of new housing. They would enjoy considerable autonomy, he wrote, making use – on a voluntary rather than compulsory basis – of expert advice provided by the state construction-service agencies.³³ This concept shows that, at that time, Piaścik was

"Secondary Production Support Fund" (M.P. 1951 no. 27 item 337), which emphasised work competition.

29 Franciszek Droźniak from the village of Goszcza in the Miechów district, as quoted by Zygmunt Racięcki, *Budynki z gliny* [Clay buildings], Warsaw, 1958, p. 5.

30 Government Presidium Resolution no. 269 dated 8 May 1954 on housing cooperatives and the tasks of cooperatives regarding housing construction (M.P. 1954 no. 59 item 792). Resolution no. 270 Government Presidium Resolution dated 8 May 1954 on state aid for individual housing construction (M.P. 1954 no. 59 item 793).

31 Decree dated 25 June 1954 on residential spaces in housing cooperative buildings and single-family houses (Dz.U. 1954 no. 31 item 120). On the unfavourable attitude of Stalinist authorities to this type of housing: D. Jarosz, *Mieszkanie się należy... Studium z peerelowskich praktyk społecznych* [An apartment is due... A study of social practices in the People's Republic of Poland], Warsaw, 2010, pp. 44–45. Symptomatically, Mołdawa presented his ideas as early as in 1951 at the Central Association for Timber Industry and in 1952 to the Minister of Light Industry – with no reaction at all. Mołdawa, *Domki jednorodzinne...*, p. 278.

32 J. Cegielski, *Przełom w budownictwie mieszkaniowym. Zakład Osiedli Robotniczych 1948–1955* [A breakthrough in housing construction. The Workers' Housing Estate Company, 1948–1955], Warsaw, 1983, p. 57.

33 F. Piaścik, *Odbudowa i przebudowa wsi. Problematyka* [Reconstruction and redevelopment in rural areas. Problems], Warsaw, 1945, pp. 39, 40.

close to the circle of activists associated with the Warsaw Housing Cooperative (Michał Kostanecki, Roman Piotrowski, Wojciech Piróg and Stanisław Tołwiński were the co-authors of this programme).

The topic of cooperative housing in the provinces, based on cheap waste materials and local materials, come back into circulation in the mid-1950s. One of Mieczysław Mołdawa's articles was clearly prepared as an aid in the development of autonomous cooperative housing construction based on lightweight pre-fabricates turned out by small, mobile production plants making use of local materials, whose supply was only to a limited extent dependent on the centrally regulated resources. He envisaged "itinerant brickmakers of the 20th century", equipped with an autoclave allowing them to produce microporites and foam-silicates (types of cellular concrete)³⁴. They would not work according to a strictly determined plan, since they would organise their work themselves. Local and waste materials would assure the cooperative movement's autonomy, as they would free it from the constraints of centralised organisation. It may be said that these concepts for a bottom-up organisation of housing construction were an expression of similar ideas on how to modernise the operation methods of the socialist economy that would be proposed two years later at the workers' councils of the Thaw era.

In addition, construction based on local and waste materials was supposed to provide the designer with an interesting and varied experience. On the one hand, he would learn to work with primitive waste materials, which were softer and more responsive to processing than traditional materials, such as brick. On the other hand, Mołdawa was fascinated with the idea of an architect's active involvement in the final preparation of microporite or foam-silicate elements to be produced on-site, for instance by designing suitable profiling, the shape of which would determine the aesthetic form of the structure. Conceptual work focused more on creating a system of elements than on designing the building itself is, of course, typical of prefabricated construction (this was noted, in almost the same period, by Zygmunt Kleyff)³⁵. Here, however, in on-site conditions, in the atmosphere of greater freedom and without the bureaucratic pressure attendant on the large-series production procedures, the architect's work could more easily become an intellectually interesting and inspiring exercise in modern design.

Mołdawa's interpretation of the concept of prefabrication was entirely different from that proposed in the majority of Polish publications of the era, which promoted large-block solutions. This was a way of referring to the idea of mass prefabrication in the construction of small houses, essentially close to that practised in Scandinavia or English-speaking countries (but, in the conditions of the Far East, in the Soviet Union as well). This lightweight prefabrication gave an occasion to refer to another topic that was almost entirely absent from the Polish construction practice, namely, the construction of quickly assembled houses (assembly requiring 1–2 days) which

34 M. Mołdawa, *Domki z materiałów zastępczych i niedeficytowych*, p. 69.

35 On Kleyff, in detail, in: M. Czapelski, *Moduły i wieżowce. Polscy architekci wobec przemian w budownictwie mieszkaniowym 1956–1970* [Modules and high-rises. Polish architects in the face of transformations in the housing construction industry, 1956–1970], Warsaw, 2018.

made it possible to house in good conditions, for instance, workers employed on large construction projects. Of course, Mołdawa also considered the method applicable to detached/semi-detached housing construction, especially if prefabricates made of more durable materials, such as slag cement and slag plaster, were used.

Another example of a substitute material enthusiastically promoted in the mid-1950s specialist press and used in the lightweight prefabrication were reed boards, which constituted local and waste material at the same time. The large-scale introduction of this material was presented as an important factor in the modernisation of the Polish construction industry; in this, the press was probably following Soviet examples, since an intense campaign for importing reed and reed products as construction materials to rural areas had been undertaken in the USSR after the war.³⁶

Research on the use of reed in improved construction technologies was undertaken in Gdańsk by Włodzimierz Prochaska; reed-based construction was promoted by Seweryn Chrzanowski.³⁷ Reed was widely discussed in press when in 1954 a model of a single-family house was presented at the National Exhibition of Inventions and Technological Advances (Fig. 2)³⁸. Small, single-family reed houses were one of the main design topics when a catalogue of standard designs was prepared by the Committee of Urban Planning and Architecture (Komitet Urbanistyki i Architektury) in 1956.³⁹ The cost-cutting experiments continued with the study of bulrush and other wetland plants as raw material.⁴⁰

However, the large-scale introduction of reed boards as a construction material meant an essential change in the approach to substitute and waste materials: industrial production was more important than independent manufacture carried out by private producers. In 1954, the manufacture of timber-frame houses with reed-board cladding was undertaken in Mikołajki and Nida, initially on a small scale; a facility was established soon after in Namysłów, which had a larger production potential (even though the chronic shortage of timber limited the actual output).⁴¹

36 W. S. [Witold Szolginia?], "Stosowanie trzciny w radzieckim budownictwie wiejskim" [The use of reed in Soviet rural construction], *Architektura*, 1955, 9, no. 12, p. 373, based on *Apxumekmupa CCCP* 1955, no. 8.

37 W. Prochaska, *Trzcinobetonowa budowa doświadczalna w Oliwie* [An experimental reed-concrete structure in Oliwa], Warsaw, 1951; W. Prochaska, *Budownictwo z zastosowaniem trzciny* [Construction with the use of reed], Gdańsk, 1954.

38 J. Wilk, "Wrażenia z Krajowej Wystawy Wynalazczości i Postępu Technicznego we Wrocławiu" [Impressions from the National Exhibition of Inventions and Technological Advances in Wrocław], *Biuletyn Instytutu Urbanistyki i Architektury* 1954, no. 6, p. 4. [J.G.W.] "Zastosowanie płyt trzcinowych w budownictwie" [Application of reed boards in construction], *Architektura*, 1954, 8, no. 12, p. 309.

39 A. Nitsch, "Z prac KUA" [The works of the Committee of Urban Planning and Architecture], *Architektura*, 1956, 10, no. 1, p. 22.

40 Z. Kotarski, *Pałka jako materiał izolacyjno-budowlany* [Bulrush as an insulation and construction material], Warsaw, 1957.

41 The Masurian Facility for Reed Prefabricates and Namysłów Facility for Reed Prefabricates were established. J. Ginett-Wojnarowiczowa, "Produkcja domków z płyt trzcinowych" [Small houses constructed from reed boards], *Architektura*, 1957, 11, no. 5, p. 162.

sokościowych. Inwentaryzacja terenów budowlanych nie była nawet zapoczątkowana. Tymczasem z początkiem roku 1945 przystąpiliśmy do prac nad planowaniem rozwoju urbanizacji zespołu. Brak pomiarów zasadniczych i planów podstawowych zmusił do prowadzenia prac projektowych na mapach sztabowych w skali 1 : 25.000 lub 1 : 100.000, częściowo przestarzałych, a przede wszystkim zbyt niedokładnych dla opracowań projektów technicznych inwestycji kompleksowych, ciężkich i kosztownych. Pierwsza faza ogólnych projektów urbanistycznych W.Z.M. dobiega końca. Są to właściwie szkice generalne, które od biedy mogłyby być wykonane na posiadanych planach i mapach, ponieważ chodziło tylko o grubsza orientację perspektywiczną bez ocen ściśle technicznych i ekonomicznych. Obecnie W.Z.M. wychodzi już z okresu szkiców koncepcyjnych, do których wystarczały mapy sztabowe.

Musimy zabrać się do opracowania technicznych projektów szczegółowych i poszukiwać rozwiązań ekonomicznych, a więc prowadzić obliczenia porównawcze, ściśle. Wykonanie poprawne tych zamierzeń natrafia na ogromne trudności właśnie z powodu braku podstawowych materiałów pomiarowych, co w rezultacie doprowadza do rozwiązań dorywczych, sporządzanych w pośpiechu pod presją okoliczności nagłych, a więc zapewne ani najlepszych, ani tanich. Stwierdzić więc należy, że wobec realnych konieczności stan miejskiej dokumentacji pomiarowej oraz inwestycji komunalnych terenów budowlanych w Warszawie jest niezadowalający dla ścisłego projektowania inwestycji nawet w obecnych granicach miasta. Teren sąsiedztwa W.Z.M. położone poza granicami administracyjnymi stolicy nie posiadają w ogóle dokumentacji pomiarowej w ścisłym tego słowa znaczeniu.

Jest rzeczą zupełnie jasną, że zwykła regularizacja potrzeb miejskich w dziedzinie pomiarów W.Z.M. będzie trudna, długotrwała i kosztowna, ale właśnie z tych względów musi być jak najprędzej powołana instytucja centralna, która by się zajęła tymi wszystkimi sprawami i w miarę możliwości zaczęła je organizować. Odkładanie tego problemu do lepszych czasów doprowadzi do jeszcze większych komplikacji w przyszłości. Narastają one stale w tempie lawinowym i już dziś powodują pewne zahamowanie działalności inwestycyjnej, w przyszłości zaś mogą doprowadzić do bardzo ciężkich komplikacji i strat znacznych środków. Miejskie przedsiębiorstwo pomiarowe, obsługujące obecnie bieżące potrzeby stolicy, powinno jak najprędzej uzyskać także możliwości rozwojowe, aby było w stanie poszerzyć i pogłębić zakres swego działania. Sprawa jest bardzo paląca i każdy rok utracony powoduje duże i kosztowne komplikacje w całości gospodarki miejskiej Zespołu, a przede wszystkim w jej wielkich zadaniach inwestycyjnych.

Dotychczasowa praktyka inwestycyjna Warszawy doprowadza nas do pewnych wniosków zasadniczych w dziedzinie organizacji pomiarów miejskich. Działalność organizacji pomiarów miejskich podraża koszty inwestycyjne, a w niedługiej przyszłości zahamuje rozwój inwestycji typu kompleksowego, co w rezultacie opóźni realizację obiektów ściśle budowlanych. Kompleks podstawowych pomiarów miejskich powinien być traktowany jako inwestycja sama w sobie. Inwestycja ta powinna wyprzedzać wszystkie inne przynajmniej o parę lat. Całość zasadnień pomiarowych powinna być skoncentrowana w rękach silnej instytucji.

Nadesłał W. Skoraszeuski

Zastosowanie płyt trzcinowych w budownictwie.

Płyty trzcinowe produkowane w Polsce od 1932 r. w Zakładach w wól. podolskim były materiałem mało znanym i mało stosowanym w budownictwie. W poszukiwaniu materiałów zastępczych zwrócono dopiero dziś uwagę na ten cenny i tani materiał, dzięki ogromnym zasobom trzciny w naszym kraju: na Pojezierzu Mazurskim i Suwalszczyźnie, na jeziorach Zachodniego Pomorza oraz w zalewach Elbląskim i Szczecińskim. Zarząd Przemysłu Wikliniarsko-Trzcinlarskiego prowadzi w tych ośrodkach wytwórnię prasowanych płyt trzcinowych.



Dom mieszkalny z elementów trzcinowo-drewnianych, kryty dachówką, otynkowany zewnątrz i wewnątrz. Produkcja tych elementów na kompletne zestawy budynków jest przewidziana przez Zarząd Przemysłu Wikliniarsko-Trzcinlarskiego w roku 1955. Foto F. A. Czełny.



Domek tego typu w budowie, z uwidocznieniem ściany trzcinowo-drewnianej i wiązania dachowego. Foto F. A. Czełny.

nowych. Znalazły one już zastosowanie w budownictwie. Ostatnio we Wrocławiu na Krajowej Wystawie Wynalazczości i Postępu Technicznego ogólnie zainteresowanie wzbudził domek ogrodowy, wykonany z elementów trzcinowo-drewnianych kryty trzcina i dom 5-izbowy, wykonany z tychże elementów, otynkowany obustronnie, kryty dachówką. Domki zostały wykonane według projektów arch. Tadeusza Michałczewskiego z Gdańska.

Montaż domków jest łatwy i prędko. Dom o powierzchni 100 m² wymaga 4 dni na zestawienie i do 10 dni na wykończenie. „Żywy” domek ogrodowy obliczony jest na 10–15 lat — dużego na 50 lat. Koszt 8–10 elementów domku wynosi do 2000 zł, a dużego, składającego się z 35 elementów prefabrykowanego trzcinowo-drewnianego do 20.000 zł. Domek ogrodowy tego typu, kryty eternitem można obejrzeć w Falenicy przy Warsza-

wa w kolonii domków mieszkalnych T-wa Budowy Osiedli Podmiejskich.

Do domku ogrodowego zastosowano płyty trzcinowe i elementy trzcinowo-drewniane o wymiarach 155 × 200 cm na ściany i 4 połacie trójkątne dachowe. Na konstrukcję elementu składa się rama z desek o grubości 25 mm oraz płyta trzcinowa grubości 5 cm, umocowana na listwach. Na dom mieszkalny użyto 35 elementów o wymiarach 169 × 280 cm. Elementy te składają się z ramy drewnianej o przekroju 5 × 10 cm oraz z wmontowanych w nią 2 płyt trzcinowych o grubości 5 cm. Płyty o konstrukcji trzcinowo-żerdziowej mają zastosowanie na wszytych budynków inwentarskich, 1 m² ściany kosztuje około 40 zł. Koszt płyty trzcinowej za 1 m², zależnie od grubości (od 3,5 cm do 7 cm) wynosi od 13,10 zł do 20,40 zł.

Nadesłał J. G. W.

Fig. 2. An article on the National Exhibition of Inventions and Technological Advances in Wrocław, 1954, with photographs of a house constructed of reed and timber elements, *Architektura*, 1954, no. 12, p. 309

The houses had been designed by a team supervised by an engineer named Michalczewski. The clients were mainly individual buyers, organised employment institutions to a limited extent; this indirectly confirmed that the policy of assuaging private demand with non-deficit materials was, in fact, effective. Their production continued in the following decades; even as late as the 1970s and 80s the so-called *mikołajek* ("a house from Mikołajki") was often allocated as a cheap dwelling for village and small-town teachers.⁴²

Thus, in the mid-1950 the local and waste materials became an area for testing increasingly more advanced technologies. One example is the method of constructing small detached houses prefabricated from timber wastes, developed by Tadeusz Perkitny and his team at the Institute of Timber Technology (Instytut Technologii Drewna) in the years 1957–1959. Materials developed therein: pressed wood-shavings (known as Impernit) and pressed sawn wood (Imperkol) were used in the construction of an experimental house (designed by Tomasz Mańkowski) at the Czeladź mine.⁴³ It was hoped that about a thousand houses per year could be produced using this technology, on the condition that suitably cheap waste materials (cuttings of extracted oakwood from tanneries) could be obtained.

The support for technological experiments in small-scale construction increased in the atmosphere of the Thaw, leading, in 1957, to a rather unusual presentation of houses designed by Eugeniusz Ajewski, built in Falenica in the years 1949–1956.⁴⁴ They had been constructed by a Single-Family House Construction Cooperative "Co-operative Workers' Estate" (Spółdzielcze Zrzeszenie Budowy Domów Jednorodzinnych „Spółdzielcze Osiedle Pracownicze”), an organisation active in the Stalinist era. In the conditions of the Thaw, these houses were presented as exemplifying a model solution for a cooperative campaign, now much tooted by the authorities. Concurrently, the houses, of which there were eight types, were promoted as “a true exhibition” and, moreover, an exhibition not of prototypes, but structures “designed and constructed in close cooperation with their users”. They were presented as an example of technological experimentation in the area of construction-material technology. The press wrote about a succession of tests conducted in cooperation with the Institute of Construction-Material Chemistry and Technology at the Warsaw University of Technology, supervised by Prof. Włodzimierz Skalmowski. One of the tested materials was “wood-shaving/reed concrete”; the ultimate verdict, however, was that “the cheapest way of building small houses so as to avoid unpleasant

42 As mentioned in the memoirs of e.g. A. Przygięda, *O Janie Przygiędzie* [About Jan Przygięda], http://www.zsp.kalisz.pl/projekt/index.php?option=com_content&view=article&id=130&Itemid=22 [accessed 22 Aug. 2014], W. Kruszewski, *Jak ratowałem pałac w Patrykozach* [How I was saving the palace in Patrykozy], <http://www.wiescisoskolowskie.pl/jak-ratowalem-palac-w-patrykozach-czesc-1,07A5j3te76gE6u9u8Sq53x61EeLL219lp542z8h1X96KqBOH6k.html> [accessed 22 August 2014].

43 T. Mańkowski, “Domki prefabrykowane z odpadów drzewnych” [Small houses prefabricated from timber waste], *Architektura*, 1959, 13, no. 10, pp. 465–466.

44 E. Ajewski, “Domki jednorodzinne w Falenicy” [Small single-family houses in Falenica], *Architektura*, 1957, 11, no. 9, pp. 333–336. Similar houses were built in Michalin.

surprises is from whole or broken brick". It must be noted that this was one of the very rare cases when the practical applicability of waste-based construction materials was publicly questioned.

Nevertheless, construction based on clay or other locally available materials was still presented as a good option for larger sections of the society, not only for the rural population (even though the latter was still clearly perceived as the potentially largest target group). Popular handbooks and instruction books began to be published starting from 1956, including the large series *Budujemy sami* by the Arkady publishing house.⁴⁵ These texts promoted the universal use of local materials, following the precept that "bad materials [...] do not exist; all that is needed is to employ them properly, so that they correspond to the given construction project". They also emphasised that "the use of clay in construction undoubtedly arises from the needs of national economy; but we must not treat clay-based construction as a temporary measure dictated by necessity. Clay is an excellent construction material, and a very cheap one as well, because it is obtained from pits dug for foundations or cellars, or from some other place not far from the construction site. Clay-based construction fully satisfies the technological and hygienic requirements of a contemporary dwelling-house".⁴⁶

A peculiar context for these actions aimed at popularising methods of building houses correctly and cheaply, was provided in the mid-1950s by the results of research on unauthorised, "wild" housing construction conducted by the Institute of Housing Construction (Instytut Budownictwa Mieszkaniowego, IBM). Established in 1949, it continued the work of the liquidated Polish Association for Housing Reform (Polskie Towarzystwo Reformy Mieszkaniowej), but it operated within the state structures. In its activity, the Institute to a certain extent maintained the pragmatic attitude shown by some of the social activists of the inter-war period, namely, the ones who had considered a detached house with a garden to be an important model of residential construction – a model that provided a real alternative to a modernist multi-family block in both urban and rural environments.⁴⁷

45 M. Grąbczewska, *Jak samemu zbudować domek z gliny* [How to build a clay house on one's own], Warsaw, 1956 (2nd ed. 1957); L. Lipowski, "Budujemy sami" [DIY building], *Biblioteka Przyjaciółki* series, 1957, no. 2; Z. Witebski, *Miejscowe materiały budowlane* [Local building materials], Warsaw, 1957. The *Budujemy sami* [DIY building] series included, among others, the following volumes: S. Choliński, *Budynki z tworzyw cementowo-glinianych* [Buildings of cement-and-clay materials], Warsaw, 1958, Chrzanowski, *Budynki z płyt słomianych i trzcinowych* [Buildings of straw and reed boards], Warsaw, 1958, T. Hazler, *Budynki z żużłobetonu* [Buildings of slag concrete], Warsaw, 1958, (2nd ed. 1960, 3rd ed. 1969), M. Łukaszewicz, *Budynki z masy wapienno-piaskowej* [Buildings of limestone-and-sand mass], Warsaw, 1958, Z. Racięcki, *Budynki z gliny* [Buildings of clay], Warsaw, 1958, (2nd ed. 1962), Z. Wyganowski, *Budynki z kamienia* [Buildings of stone], Warsaw, 1958.

46 M. Grąbczewska, *Jak samemu...*, p. 4.

47 M. Rozbicka, *Małe mieszkanie z ogrodem w tle w teorii i praktyce popularnego budownictwa mieszkaniowego w międzywojennej Polsce* [A small apartment with a garden in the background, in the theory and practice of popular housing construction in inter-war Poland], Warsaw, 2007.

The issue of unauthorised self-financed construction, almost never mentioned in texts published in the Stalinist era,⁴⁸ entered the professional press at the time of the Thaw, signalling the emergence of a problem of considerable social significance.⁴⁹ Although the fact that temporary, makeshift buildings constructed without state permits had to be condemned, it must be noted that the architects and housing activists working in the state apparatus displayed a certain degree of human understanding.

Paradoxically, the “jerry-built houses” in Warsaw often complied with the official government postulates of using local or waste resources, since they were constructed from various easily obtainable materials. In spite of the chaos they introduced into urban planning, such houses could be seen as a monument to human ingenuity. The vast majority of them did not exceed the state-imposed limitations on the size of residential architecture.

Tadeusz Kachniarz wrote that “makeshift structures are a reflex solution in poor societies, who see them as a cheap and quick method for meeting the most pressing needs. Experience teaches us that there is no programme which could not be, or indeed was not, implemented by using a provisional solution”.⁵⁰ The most prominent expert on unsanctioned construction, Jerzy Cegielski, also emphasised the importance of the social needs and emotions it expressed: “Unsanctioned construction is a manifestation of an active stance which a certain group of citizens takes with regard to their needs – a stance full of conflicts and confrontations between the ‘old’ and the ‘new’ – when, forced to rely on their own means and measures, faced with difficulties, these citizens strive towards their goals using outdated traditional methods”.⁵¹

The IBM milieu considered artisan-like construction of small houses on privately owned plots of land to be a meaningful antidote to the problems caused by the unsatisfactory nature of housing construction in Poland. A statement made by Juliusz Goryński in a survey on prefabrication must be viewed in this context:

The “unilateral” drive towards “mass industrialisation” or rather “mass prefabrication” is rooted in pessimism born of doubt in the feasibility of initiating a revival of the pro-

48 One of the few exceptions was a study by Jerzy Cegielski, *Dzikié budownictwo mieszkaniowe w Warszawie w okresie powojennym. Materiały i dokumentacja* [Unauthorised housing construction in Warsaw in the post-war period. Materials and documentation], Instytut Budownictwa Mieszkaniowego, Seria B, fasc. 12, Warsaw, 1951.

49 A. Majorek, “Zielone światło dla budownictwa indywidualnego” [A green light for individual housing construction], *Architektura*, 10, 1956, no. 12, p. 436; J. Bukowski, “Ze studiów nad nieopanowanym budownictwem pozaplanowym” [From the studies on unregulated non-planned construction], *Biuletyn Instytutu Urbanistyki i Architektury* (a supplement to *Architektura*), 1957, no. 1, pp. 2–3.

50 T. Kachniarz, “Baraki czy budownictwo uproszczone” [Huts or simplified structures], *Architektura*, 1957, 11, no. 7, p. 244.

51 J. Cegielski, *Dzikié budownictwo w Warszawie (w świetle dokumentów walki z samowolą budowlaną)* [“Wild” construction in Warsaw (in the light of documents on fighting non-planned construction)], Warsaw, 1963, p. 14.

fessional morale of construction workers, in the revival of a craft which had been lost in the previous era. [...] in my view it is inescapably necessary to abandon the technocratic direction of construction policy, to restore the prestige of human work, and to rebuild the morale of workers and other employees in the construction industry. It appears that the depreciation of the role of the human factor, and the decline in the value of craftsmanship in construction, stem from the still deeply rooted anti-humanist views of the former period of mistrust.⁵²

This fascination assumed a particularly interesting form in one of Jan Minorski's later texts on this topic, published in 1963, bearing the meaningful title of "Impromptu Architecture" ("Architektura samorzutna")⁵³ (Fig. 3). Minorski defined it as "spontaneous, resulting from vigorous action, down-to-earth, emerging without a design, 'Tachistic', so to speak".⁵⁴ The article contains many observations regarding the social makeup of the inhabitants of such structures. Its tone betrays compassion, as well as a fascination with the process of modernising design and functional solutions apparent in this architecture; such improvements were, in Minorski's view, discovered "not through imitation, but simply by deriving ideas from certain elements of the modern environment". Minorski envisioned impromptu architecture as a tendency that could not be stopped by any regulations and that would not subside until at least the year 1980. In his view, the only two ways of dealing with the issue in the foreseeable future would be to either provide every citizen with a dwelling or to ultimately eliminate the option of individual people possessing land and building materials. One cannot help thinking that Minorski's opinion was motivated by his fascination with the spontaneous processes of a community organising its life, a phenomenon made fully apparent by the analyses of social and spatial mechanisms in the cities of the Maghreb region as presented by a group of young modernist architects at a CIAM conference organised in Aix-en-Provence in 1953. Temporarily abandoning the role of a moralising expert, Minorski marvelled at and admired the evolution of unsanctioned architecture as one that maintains constant and intimate relations with the lives of its inhabitants. This non-dogmatic attitude resembles the scientific curiosity of Jane Jacobs, who summarised her views on the phenomenon of urban life in her book *The Death and Life of Great American Cities*, published two years earlier (although, of course, both the size and the intellectual scope of the two works are hardly comparable).⁵⁵

Awareness of the scale of uncontrolled, unsanctioned construction indubitably made the government more willing to find effective countermeasures. The solution

52 J. Goryński, statement in the *Przegląd Budowlany* questionnaire "O polski model gospodarczy na odcinku budownictwa" [On the Polish economic model in the area of construction], *Przegląd Budowlany*, 1957, no. 4, p. 128.

53 J. Minorski, "Architektura samorzutna" [Impromptu architecture], *Architektura*, 1963, 17, no. 4, pp. 113–124.

54 Ibid., p. 114.

55 J. Jacobs, *The Death and Life of Great American Cities*, New York, 1961.

Różne pomysły programowe i przestrzenne w architekturze samorządnej. Przykład domku wykonanego częściowo bezpośrednio po wojnie (2 × deski, 3 × worek z papierowego futra, 2 × tynk), częściowo w 1960 r. (cegła 13 cm, płyta miękka, spłisniona, 2 × tynk). Ciepło i sucho



Solarium. Wobec wilgotnego mieszkania ma tym większą wartość



Powyżej:

Wnętrze tego ciasnego pokoju mieszkalnego rozświetla wieczorem okno telewizora



Wnętrze domku widocznego na zdjęciu górnym. Budownicy domku wraz z małżonką na tle mebli posbieranych z „całego świata”

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Fig. 3. Passage from Jan Minorski's article "Architektura samorządna", *Architektura*, 1963, no. 4, p. 121

came in 1957, in the form of an initiative to design single-family houses (mostly as row housing) commissioned by local-government councils. The aim was to “provide organisational structure to the relentless drive towards individual construction and turn the entire initiative into a mass phenomenon”.⁵⁶ The regulation regarding state aid for self-financed housing construction projects introduced in March 1957 reasserted the government’s lingering hopes associated with saving on materials, stating that “the amount of the loan granted could depend on the type of the building and on the use of specific materials of local provenance, with a preference for local materials that are not in short supply”.⁵⁷ Additional incentive for citizens planning to build their own houses came from the resolution passed in May of the same year, which excluded single-family houses and cooperative residential housing from the state governance of residential spaces. This resolution extended the provisions of the 1954 decree that excluded houses which did not exceed an area of 110m² from state-regulated housing allocation.⁵⁸

In 1957, contests were announced in the Silesian, Bydgoszcz and Warsaw voivodships (repeated the following year in the latter) for prototype buildings constructed with the simplest methods, made from commonly available and cheap materials. This implied using locally sourced materials and waste products from industrial plants.⁵⁹ The living space in such houses was usually less than 80m². The most widely publicised solution was Tandom, described as the first fire-resistant prefabricated single-family house. Its prototype, constructed in Szczecin, was to become the basis for a series of similar houses (designed by Mieczysław Janowski, constructed by M. Masłowski) commissioned by the local government council in Szczecin. The single-story house with no basement was made of light materials – panels with ferroconcrete frames filled with slag concrete, foamed gypsum and wood-shaving concrete based on gypsum – appeared to be the most compliant with the contest requirements (Fig. 4).⁶⁰

These contests were the greatest organised effort undertaken by Gomułka’s government (1956–1970) to adapt cheap methods of mass construction, the search for which intensified in the mid-1950s, to the organisational and technical circum-

56 J. Gottfried, “Domki dla Śląska” [Small Houses for Silesia], *Architektura*, 1957, 11, no. 4, pp. 152–153; S. Putowski, “Szeregowe budownictwo mieszkalne” [Row housing], *Architektura*, 1957, 11, no. 8, pp. 305–314; M. Wahrenowa, “Szeregowe domki jednorodzinne” [Single-family row houses], *Architektura*, 1958, 12, no. 5, pp. 185–192.

57 Council of Ministers Resolution no. 81 dated 15 March 1957 on state aid for housing construction financed from the citizens’ personal funds (M.P. 1957 no. 22 item 157).

58 Resolution dated 28 May 1957 on the exclusion of single-family houses and cooperative residential housing from the state governance of residential spaces (Dz.U. 1957 no. 31 item 131).

59 *Wytyczne do założeń projektowych dla budownictwa niskiego z materiałów miejscowych* [Guidelines for the design principles for low-height structures built of local materials], Instytut Budownictwa Mieszkaniowego, Warsaw, 1957, were issued in January 1957.

60 Z. Wyganowski, “„Tandom” pierwszy prefabrykowany ogniotrwały domek jednorodzinny” [“Tandom”, the first fire-resistant prefabricated single-family house], *Inżynieria i Budownictwo*, 1958, 15, no. 3, pp. 79–83; A. M. Szymski, *Architektura i architekci Szczecina 1945–1995* [Architecture and architects in Szczecin, 1945–1995], Szczecin, 2001, pp. 88–89.

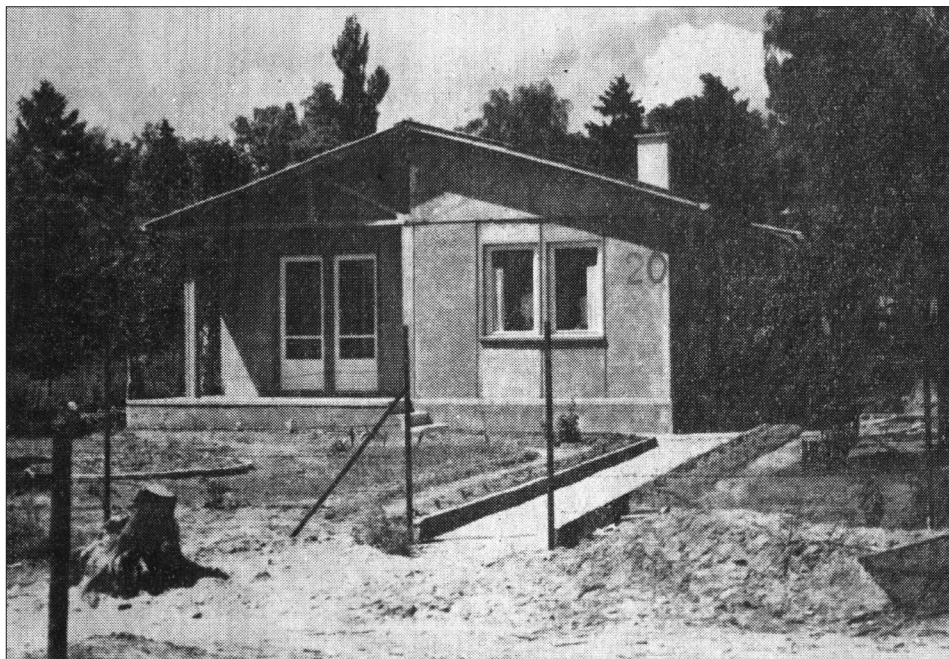


Fig. 4. A Tandom house in Szczecin, after *Miasto*, 1960, no. 10, p. 10

stances of the day. Together with the regulation authorising state loans for the construction of single-family residences, they were the first indication of state support for such housing to be visible in the state media in many years.

It should be noted that the above-mentioned contests constituted the first effort towards a satisfactory adaptation of local, substitute and waste material to the aesthetics of modernist architecture. The earlier model house designs by Młodawa, the set of single-family houses in Falenica, and Michalczewski's complex, all made use of a gable-roof house in its modernised version, which adapted solutions known from the garden-cities of the first half of the century. The designs made for national councils, in turn, lacked the traditional suburban air, featuring predominantly flat roofs.

Low-height housing provided with state support and technological counselling was an indication that the authorities accepted, to some extent, architectural models popular in the USA and in Western Europe. Familiarity with these standards grew rapidly, although it seems symptomatic that the largest project aimed at presenting American examples of prefabricated single-family houses in the technical press was discontinued after the first instalment in the planned series.⁶¹ Local materials were to become an element in a system of lightweight prefabricates in the American style.

⁶¹ W. Iwanowski, "Budownictwo domów jednorodzinnych w Stanach Zjednoczonych AP" [Single-family housing construction in the USA], *Przegląd Budowlany*, 1957, 29, no. 4, pp. 129–138.

The article about Tandom was used as an opportunity to criticise heavy prefabrication, which had been introduced in socialist countries and in France and which was prioritised also by the decision-making organs in Poland. A comparison of the weight of one cubic metre of the Tandom design with that of the prefabricated houses of the Camus, the Gottvaldov or the Syrkus systems, was used as a reason to criticise the official residential-construction policy on the grounds of technology. Nevertheless, the design for the prefabricated single-family house did not manage to reach full accordance with the American idea of prefabrication – the notion of a do-it-yourself house – for a number of reasons, not the least of them being the (still) substantial weight of the panels, which amounted to almost 200 kilograms. It was, however, emphasised that the assembly could be completed without the help of qualified staff. Thus, the construction of such a building was more dependent on the technical equipment usually available at state-controlled construction projects.

Similar implementation-related limitations applied to the experimental cost-effective semi-detached residential house made of large-size panels of aerated concrete weighing 176kg each, presented in the Żerań district of Warsaw in 1963.⁶² The costs of its construction were reduced not through the use of local or waste materials, but due to the fact that it had no foundations and its walls were not plastered. However, the assumption that the mass production of single-family houses assembled using state-owned lightweight cranes and made of factory-produced materials from state-owned companies would solve the problem of mass construction proved too optimistic and ultimately unfeasible. The majority of low-rise residential buildings were still being erected by individual citizens using “technologically outdated, heavy and expensive” solutions.⁶³ In fact, the authors of studies promoting cheap single-family housing designs sometimes admitted in their calculations that traditional technologies were still more cost-effective compared to prefabrication.⁶⁴

The experimental designs presented above made it apparent that the governmental policy regarding the prescribed direction of development for small construction projects – a policy officially promoted since the post-Stalinist Thaw – was inherently contradictory and increasingly biased. These tendencies are even more visible in the discussion after the 1963 contest for economical single-family houses.⁶⁵ This contest effectively became the coda that closed the period of directing the public eye towards model designs of such structures (for instance, it was the last contest for single-family houses to be publicised in *Architektura* (*Architecture*) periodical in that decade). The state policy regarding loans favoured “economical, small single-family houses”, i.e. ones constructed of “local materials, with modest

62 J. Jaszuński, “Domek mieszkalny z płyt gazobetonowych” [Small residential house from aerated concrete blocks], *Architektura*, 1963, 17, no. 4, p. 125.

63 Ibid.

64 M. Jassem, “Zorganizowane oszczędne budownictwo mieszkaniowe” [Cost-effective organised housing construction], *Architektura*, 1963, 17, no. 11, p. 435.

65 A. Bołtuć, “Konkurs na oszczędne budownictwo jednorodzinne” [A contest for cost-effective single-family housing], *Architektura*, 1964, 18, no. 4, pp. 133–148.

furnishing standards, with no basement or partial basement only, and living spaces limited in area and appropriate for the size of the loan-taker's family".⁶⁶

Contest designs were to be implemented as a national standard, while the steep requirements set the cost below 1,700 zloty per 1m² and specified that the building was to have no cellar and be adjusted to areas without running water or a sewage system. Suggestions included saving on steel and wood and using cheap technological solutions that would require only a limited use of mechanical equipment in the construction process. The construction was to be possible with the user's own means ("using household methods"), with constructional and load-bearing elements produced on-site or manufactured to be stored in warehouses. The decision to implement the chosen designs would depend on "the specificity of local circumstances, such as e.g. raw materials or waste materials from industrial plants, the local landscape, etc."

Significantly, most of the twelve designs awarded prizes and distinctions did not feature local materials at all – the vast majority made use of various panels and blocks of regular or aerated concrete. Two of the entries included concrete with reed used as an admixture. The use of timber, including roll logs, and reed panels was a unique feature of one of the variants of Tadeusz Zieliński's design. The jury criticised this choice as non-compliant with the contest requirements (wood was "a material in short supply"). The design by Hieronim Rudecki and Mirosław Wiśniewski (Fig. 5) was granted a distinction solely due to "an interesting solution for constructional materials (shell elements) of fibreboard". This was also the only design in which the "limited durability of the elements" was apparent and noted by the jury. Resources and materials of local provenance were also included in the design by Marian Bucka and Jerzy Zawierucha (gypsum), as well as the one by Paweł Janczukowicz (the type of material used was not specified). In the discussion of contest results, Janczukowicz commented glumly: "As regards catalogue materials, the popularity of such solutions had little to do with inspiration, but rather with practice and experience, which taught us that these materials were not available. If a designer wishes to use aerated-concrete blocks, then let me remind him he won't get any. [...] This was the reason behind the search for creative solutions for many elements [i.e. the search for types available in production – M.C.]. [...] The contest requirements clearly specified that the preferred option was to use elements that could be produced on-site. Good luck to anyone trying to manufacture aerated-concrete blocks on a construction site".⁶⁷ In the architect's view, the feasibility of the design being carried out by two people was the basic condition for the ultimate usefulness of the contest entries.

66 Ordinance of the Minister of Communal Economy dated 15 February 1964 on the maximum sum and conditions of granting bank loans for the construction of houses from citizens' personal funds (M.P. 1964 no. 14 item 65).

67 "Ocena wyników konkursu w świetle dyskusji publicznej" [Assessment of contest results in the light of the public debate], edited by A. B., *Architektura*, 1964, 18, no. 4, p. 153.

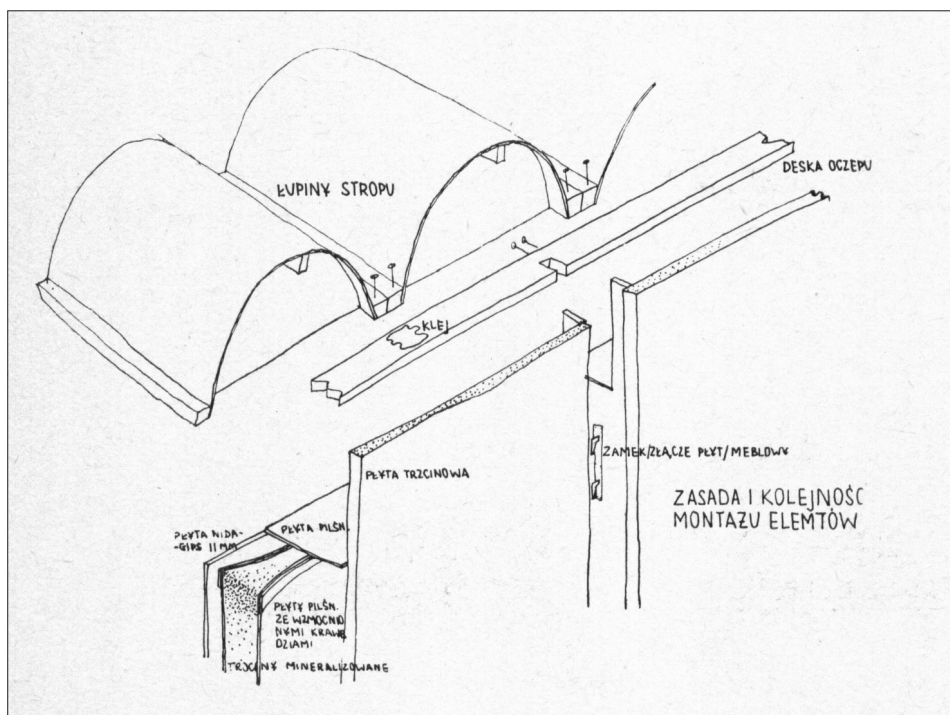


Fig. 5. Design for a house constructed of fibreboard, submitted by Hieronim Rudecki and Mirosław Wiśniewski to the SARP contest for cost-effective single-family housing, 1963, *Architektura*, 1964, no. 4, p. 146

Janczukowicz's assessment was supported by another participant in the discussion, who noted that a person with an average income had no chance of getting an apartment allocation or enlisting in a housing cooperative; a self-constructed house seemed the only solution.⁶⁸

However, as far as the contest jury was concerned, the possibility of a house being erected by two non-professionals with no external help was not a necessary requirement, as "solutions that could be produced by an intelligent person with moderate skills, and this mostly means quick fixes of plywood which one can bend and hold together with nails and slats" were noticed, but treated as "architectural curios". Since the aim of the contest was to provide "answers for today, we should be primarily interested in brick, concrete or gypsum blocks, from the catalogue, because these are commended and in widespread use".⁶⁹

The discussion that centred on the results of this contest was the final note in the public debate on the role and significance of local materials in Polish residen-

⁶⁸ The statement of Antoni Paprocki, *ibid.*

⁶⁹ The statement of Wojciech Piotrowski, *ibid.*

tial construction. In the decade that followed the first initiative of promoting local materials, they became a fixed element in the formalised jargon of acts and regulations in which the authorities expressed their demands for frugality. It is, however, clear that the idea of constructing cheap, fire-resistant houses for the poorer inhabitants of rural areas, based on economic self-sustainability and still present in the ideas for using local materials expressed around 1954, had little in common with the concepts of employing local resources articulated ten years later. As far as the Polish construction materials industry is concerned, the decade of 1961–1970 was a time of minimal growth with shrinking capital and falling employment rates. The focus on the so-called effective productivity meant less funds for the development of factories.⁷⁰ The main priority was granted to all efforts geared towards lowering production costs.

The change in official terminology is in itself significant; the word “material” was replaced with “resource”, clearly indicating its crucial role as an element in more technologically advanced industrial treatment. Simple methods of raising walls, clearly favoured earlier, started to disappear; the designs awarded in 1964 did not, for instance, make use of raw clay, instead featuring ideas to use artificially made aggregates, e.g. expanded clay, which was experimental at the time. Industrial waste products, especially slag, also rose in significance, as they were useful as admixtures to concrete.

On the one hand, these transformations testified to the technological advancement of the construction industry and the increased use of various types of concrete in private construction. On the other, they showed that the public discourse of the times was moving away from the spirit of post-Thaw criticism, when the awareness of the critical shortages on the market of construction materials became an opportunity to promote the idea of cooperative initiatives as associations of self-reliant, resourceful people able to construct their houses on the margins of the central system of brick and cement distribution. In 1964 the perception of cooperatives was already very different – not as a form of organisation aimed at voluntary collective action, but as a network of elite corporations. The discussion of the contest results included voices of bitter criticism: “To put it frankly, there are people with the connections needed to enter a housing cooperative, but for an average citizen, joining a housing cooperative has become impossible”.⁷¹

The concept of self-sufficiency in terms of resources also became obsolete; as noted above, the contest jury displayed a highly patronising attitude towards designs which included atypical, commonly available materials, clearly favouring standard industrial products. This preference was notable despite the fact that in 1964, as a decade before, individual customers had substantial difficulties acquiring allocations of construction materials.

Thus, the issue of meeting individual housing needs was drawn deeper and deeper into the grey zone of unofficial business. Instead of tackling the shortage of

⁷⁰ J. Chrumiński, *Przemysł...*, table 5, p. 358.

⁷¹ The statement of Antoni Paprocki, *Ocena wyników...*

materials by using plywood and clay, one needed to secure access to proper supplies. This view was shared by many people building their own houses, who were usually highly averse to using clay as a building material, instead willing to go to any lengths to acquire bricks.⁷²

Thus the idea of using local materials on a mass scale disappeared from architectural discourse in Poland, abandoned by the authorities and never accepted by the consumers. It had the two faces of Janus, being both the result of economic calculations made by the authorities of the Stalinist era, reluctant to grant citizens access to ordinary building materials, as well as a manifestation of the will of the common people, wishing to have their basic housing needs met.

During the Thaw, writing about local materials was in a sense tantamount to writing about the planned moral regeneration of a section of the society, that is, the citizens voluntarily associated in housing cooperatives. These remarks had a subversive, almost anarchist potential, which, though never directly expressed, could be found in the following logic: since the state is not able and not willing to supply us with the necessary building materials, we should make them ourselves – and therefore what use do we have for a state if its only contribution is to restrain construction with a set of regulations, limitations, norms, prohibitions and instruments of bureaucratic control.

Also, writing about local materials in the mid-1950s to some extent closed the chasm between the public discourse on construction and the actual state thereof. Similarly to Jerzy Wierzbicki's statement on the construction industry in interwar Poland cited at the beginning of the present article, such texts highlighted contemporary poverty, additionally hinting at the fact that construction-material shortages could be permanent.

Yet after a decade of local materials being promoted, one could hardly have any faith that these substances could mitigate the discrepancies between the still unmet needs of the population and the construction policy of the state. Private construction was entering a grey zone, not covered by any economic concepts developed by the state; the time of fashioning houses out of clay was over and the époque of cement-stealing had begun.

Yet there was wisdom in these discussions on locally obtainable construction materials, one which, in the realities of a Communist state, proved both paradoxical and enduring, as perfectly captured by the writer Tadeusz Konwicki a few years later. The following words were written in 1977, at the threshold of the crisis from which the People's Republic was not to rise ever again: "Today, my friends, every person should be self-sufficient. Each man should build his own house, plant his

72 *Formy i charakter wiejskiego budownictwa mieszkaniowego w powiatach gnieźnieńskim, pińczowskim, przeworskim, pułuskim i radzyńskim (wyniki badań terenowych I.B.M.)* [Forms and character of rural housing architecture in the communes of Gniezno, Pińczów, Przeworsk, Pułusk and Radzyń (results of field research by the Institute of Housing Construction)], ed. Z. Skałuba, Warsaw, 1958.

own potatoes and cabbages, and replace broken rain pipes or blown fixtures himself. [...] We are returning to a natural economy".⁷³

Translated by Klaudyna Michałowicz

References

- II Zjazd PZPR. Główne zadania gospodarcze dwóch ostatnich lat (1954–1955) Planu sześcioletniego. Referat wygłoszony dnia 13 marca 1954 r. przez towarzysza Hilarego Minca oraz Uchwała Zjazdu, Warsaw, 1954.
- Ajewski, E., "Domki jednorodzinne w Falenicy", *Architektura*, 1957, 11, no. 9, pp. 333–336.
- Bołtuć A., "Konkurs na oszczędne budownictwo jednorodzinne", *Architektura*, 1964, 18, no. 4, pp. 133–148.
- Bukowski, J., "Ze studiów nad nieopanowanym budownictwem pozaplanowym", *Biuletyn Instytutu Urbanistyki i Architektury* (a supplement to *Architektura*), 1957, no. 1, pp. 2–3.
- Cegielski, J., *Dzike budownictwo mieszkaniowe w Warszawie w okresie powojennym. Materiały i dokumentacja*, Instytut Budownictwa Mieszkaniowego, Seria B, fasc. 12, Warsaw, 1951.
- Cegielski, J., *Dzike budownictwo w Warszawie (w świetle dokumentów walki z samowolą budowlaną)*, Warsaw, 1963.
- Cegielski, J., *Przełom w budownictwie mieszkaniowym. Zakład Osiedli Robotniczych 1948–1955*, Warsaw, 1983.
- Choliński, S., *Budynki z tworzyw cementowo-glinianych*, Warsaw, 1958.
- Chołodziński, J., "O renesans kamienia w nowym budownictwie Polski, in: *Materiały nadesłane na zjazd naukowy PZITB w Gdańsku 1–4 grudnia 1949 r.*, part 2, fasc. 1: *Walka o materiały budowlane, ich produkcję i właściwe zastosowanie. Walka o konstrukcję i formę w budownictwie*, Wydawnictwo Ministerstwa Budownictwa no. 37, Warsaw, 1949, pp. 104–106.
- Chrumiński, J., "Przemysł w PRL – niewykorzystana szansa modernizacji", in: *Modernizacja czy pozorna modernizacja. Społeczno-ekonomiczny bilans PRL 1944–1989*, ed. J. Chrumiński, GAJT, Wrocław, 2010, pp. 316–361.
- Chrzanowski, S., *Budynki z płyt słomianych i trzcinowych*, Warsaw, 1958.
- Council of Ministers Resolution no. 1022 dated 17 Dec. 1955 r. on the use of local materials and raw materials in construction (M.P. 1955 no. 4 item 29).
- Council of Ministers Resolution no. 81 dated 15 March 1957 on state aid for housing construction financed from the citizens' personal funds (M.P. 1957 no. 22 item 157).
- Czapelski, M., "A House from a Factory: Polish Architects and Prefabricated Residential Housing in the 1950s", *Ikonotheke*, 2013, 24, pp. 155–184.
- Czapelski, M., *Moduły i wieżowce. Polscy architekci wobec przemian w budownictwie mieszkaniowym 1956–1970*, Warsaw, 2018.
- Czapelski, M., "Na uboczu. 'Miejscowe materiały budowlane' w Polsce w latach 50. XX w.", in: *Regiony wyobraźni. Peryferyjność w kulturze XIX i XX wieku*, ed. M. Lachowski, Warsaw, 2017, pp. 215–230.
- Czapelski, M., "Towards a Socialist Architecture: Architectural Exhibitions at the Zachęta in the Years 1950–1955", *Ikonotheke*, 2016, 26, pp. 31–62.

73 T. Konwicki, *The Polish Complex*, transl. R. Lourie, Champaign, 1998, p. 17.

- Скрамтаев Б., *Местные строительные материалы*, Москва–Ленинград, 1933.
- Справочник архитектора*, т. 8: *Конструкции гражданских зданий*, редактор-составитель Н. С. Дюрнбаум, Москва, 1946.
- Decree dated 25 June 1954 on residential spaces in housing cooperative buildings and single-family houses (Dz.U. 1954 no. 31 item 120).
- Dziwowski, K., *Zasady przestrzennego kształtowania inwestycji podstawowych*, Warsaw, 1948, Wydawnictwo Ministerstwa Odbudowy no. 16, Główny Urząd Planowania Przestrzennego, Planowanie Przestrzenne, Studia Teoretyczne I.
- Formy i charakter wiejskiego budownictwa mieszkaniowego w powiatach gnieźnieńskim, pińczowskim, przeworskim, pułuskim i radzyńskim (wyniki badań terenowych I.B.M.)*, ed. Z. Skałuba, Warsaw, 1958.
- Ginett-Wojnarowiczowa, J., "Produkcja domków z płyt trzcinowych", *Architektura*, 1957, 11, no. 5, pp. 162–163.
- Goryński, J., statement in the questionnaire "O polski model gospodarczy na odcinku budownictwa", *Przegląd Budowlany*, 1957, no. 4, p. 128.
- Gottfried, J., "Domki dla Śląska", *Architektura*, 1957, 11, no. 4, pp. 152–153.
- Government Presidium Resolution no. 192 dated 10 April 1954 on economy in the use of materials in 1954 (M.P. 1954 no. A-42 item 626).
- Government Presidium Resolution no. 219 dated 17 March 1951 on the production of articles of everyday use made from primary-production wastes as secondary-product turnout at state industry facilities, and the institution of the "Secondary Production Support Fund" (M.P. 1951 no. 27 item 337).
- Government Presidium Resolution no. 269 dated 8 May 1954 on housing cooperatives and the tasks of cooperatives regarding housing construction (M.P. 1954 no. 59 item 792).
- Government Presidium Resolution no. 270 dated 8 May 1954 on state aid for individual housing construction (M.P. 1954 no. 59 item 793).
- Grąbczewska, M., *Jak samemu zbudować domek z gliny*, Warsaw, 1956 (2nd ed. 1957).
- H. K. [H. Karpowicz?], "Kronika. Materiały budowlane (sesja problemowa Polskiej Akademii Nauk)", *Architektura*, 1954, 8, no. 9, pp. 231–232.
- Hazler, T., *Budynki z żużlobetonu*, Warsaw, 1958, (2nd ed. 1960, 3rd ed. 1969).
- Holsztyńska, M., "Wykorzystanie odpadków przemysłowych i produktów ubocznych o strukturze włóknistej w przemyśle materiałów budowlanych", in: *Materiały nadesłane na zjazd naukowy PZITB w Gdańsku 1–4 grudnia 1949 r.*, part 2, fasc. 1: *Walka o materiały budowlane, ich produkcję i właściwe zastosowanie. Walka o konstrukcję i formę w budownictwie*, Wydawnictwo Ministerstwa Budownictwa no. 37, Warsaw, 1949, pp. 130–131.
- Hryniewicz, J., "Materiały budowlane", *Architektura*, 1951, 5, pp. 184–185.
- Instrukcja o stosowaniu materiałów miejscowych w budownictwie wiejskim*, Warsaw, 1953.
- Iwanowski, W., "Budownictwo domów jednorodzinnych w Stanach Zjednoczonych AP", *Przegląd Budowlany*, 1957, 29, no. 4, pp. 129–138.
- [J. G. W.] "Zastosowanie płyt trzcinowych w budownictwie", *Architektura*, 1954, 8, no. 12, p. 309.
- Jacobs, J., *The Death and Life of Great American Cities*, New York, 1961.
- Jarosz, D., *Mieszkanie się należy... Studium z peerelowskich praktyk społecznych*, Warsaw, 2010.
- Jassem, M., "Zorganizowane oszczędne budownictwo mieszkaniowe", *Architektura*, 1963, 17, no. 11, pp. 432–435.
- Jaszuński, J., "Domek mieszkalny z płyt gazobetonowych", *Architektura*, 1963, 17, no. 4, p. 125.

- Kachniarz, T., "Baraki czy budownictwo uproszczone", *Architektura*, 1957, 11, no. 7, pp. 244–246.
- Konwicki, T., *The Polish Complex*, trans. R. Lourie, Champaign, 1998.
- Kotarski, Z., *Pałka jako materiał izolacyjno-budowlany*, Warsaw, 1957.
- Kruszewski, W., *Jak ratowałem pałac w Patrykozach*, <http://www.wiescisosokolowskie.pl/jak-ratowałem-palac-w-patrykozach-czesc-1,07A5j3te76gE6u9u8Sq53x61EeLL219lp-542z8h1X96KqBOH6k.html>.
- Kulesza, B., "Wnioski z narady budowniczych m. Moskwy dla architektów i budowniczych polskich", *Architektura*, 1954, 8, no. 10, pp. 233–234.
- Kupiec-Hyła, D., "Szansa dla budownictwa z gliny w warunkach rozwoju zrównoważonego budownictwa mieszkaniowego", *Czasopismo Techniczne*, 2007, fasc. 3–A, p. 148.
- Lipowski, L., "Budujemy sami", *Biblioteka Przyjaciółki* series, 1957, no. 2.
- Łukaszewicz, M., *Budynki z masy wapienno-piaskowej*, Warsaw, 1958.
- Łukaszewicz, M., *Nowoczesne budownictwo z gliny*, Warsaw, 1955.
- Majorek, A., "Zielone światło dla budownictwa indywidualnego", *Architektura*, 1956, 10, no. 12, p. 436.
- Mańkowski, T., "Domki prefabrykowane z odpadów drzewnych", *Architektura*, 1959, 13, no. 10, pp. 465–466.
- Materiały nadesłane na zjazd naukowy PZITB w Gdańsku 1–4 grudnia 1949 r.*, part 2, fasc. 1: *Walka o materiały budowlane, ich produkcję i właściwe zastosowanie. Walka o konstrukcję i formę w budownictwie*, Wydawnictwo Ministerstwa Budownictwa no. 37, Warsaw, 1949.
- Minorski, J., "Architektura samorządowa", *Architektura*, 1963, 17, no. 4, pp. 113–124.
- Mołdawa, M., "Domki jednorodzinne z materiałów zastępczych i niedeficytowych", *Architektura*, 1954, 8, no. 11, pp. 274–278.
- Mołdawa, M., "Domki z materiałów zastępczych i niedeficytowych", *Architektura*, 1955, 9, no. 3, pp. 68–70.
- Nitsch, A., "Z prac KUA", *Architektura*, 1956, 10, no. 1, p. 22.
- "Ocena wyników konkursu w świetle dyskusji publicznej", edited by A. B., *Architektura*, 1964, 18, no. 4, pp. 151–153.
- Ordinance of the Minister of Communal Economy dated 15 February 1964 on the maximum sum and conditions of granting bank loans for the construction of houses from citizens' personal funds (M.P. 1964 no. 14 item 65).
- Piaścik, F., "Budownictwo mieszkaniowe na wsi", in: *Zabudowa wsi i budownictwo wiejskie. Materiały dotyczące 1. Ogólnopolskiej Konferencji w sprawie Budownictwa Wiejskiego z dn. 26 lutego 1938 r.*, 26 Feb. 1938, ed. F. Piaścik, Warsaw, 1938, pp. 36–38.
- Piaścik, F., *Budownictwo wiejskie z materiałów miejscowych*, Warsaw, 1953.
- Piaścik, F., *Odbudowa i przebudowa wsi. Problematyka*, Warsaw, 1945.
- Prochaska, W., *Budownictwo z zastosowaniem trzciny*, Gdańsk, 1954.
- Prochaska, W., *Trzcinobetonowa budowa doświadczalna w Oliwie*, Warsaw, 1951.
- Przygięda, A., *O Janie Przygiędzie*, http://www.zsp.kalisz.pl/projekt/index.php?option=com_content&view=article&id=130&Itemid=22.
- Putowski, S., "Szeregowe budownictwo mieszkalne", *Architektura*, 1957, 11, no. 8, pp. 305–314.
- Racięcki, Z., *Budynki z gliny*, Warsaw, 1958, (2nd ed. 1962).
- Resolution dated 28 May 1957 on the exclusion of single-family houses and cooperative residential housing from the state governance of residential spaces (Dz.U. 1957 no. 31 item 131).

- Resolution of the Central Committee of the Communist Party of the Soviet Union dated 4 Nov. 1955 "On the elimination of excesses in design and construction" (Постановление Центрального Комитета КПСС и Совета Министров СССР от 4 ноября 1955 года №1871 «Об устранении излишеств в проектировании и строительстве»).
- Rozbicka, M., *Małe mieszkanie z ogrodem w tle w teorii i praktyce popularnego budownictwa mieszkaniowego w międzywojennej Polsce*, Warsaw, 2007.
- Skalimowski, A., "'Pierwsza szczerza narada architektów'. Motywy, przebieg i konsekwencje Ogólnopolskiej Narady Architektów z 1956 r.", *Polska* 44/45-1989, 2011, 11, pp. 181–190.
- Skrzekot, J., "Przed II zjazdem partii", *Architektura*, 1954, 8, no. 1, pp. 1–2.
- Szymiski, A. M., *Architektura i architekci Szczecina 1945–1995*, Szczecin, 2001.
- Tymczasowe zasady wykonywania budynków z gliny*, prepared by the Institute of Housing Construction, Warsaw, 1955, copied typescript.
- W. S. [W. Szolginia?], "Stosowanie trzciny w radzieckim budownictwie wiejskim", *Architektura*, 1955, 9, no. 12, p. 373, based on *Архитектура СССР* 1955, no. 8.
- Wahrenowa, M., "Szeregowe domki jednorodzinne", *Architektura*, 1958, 12, no. 5, pp. 185–192.
- Wierzbicki, J., "Podnieść wykonawstwo", *Architektura*, 1956, 10, no. 2, p. 30.
- Wilk, J., "Wrażenia z Krajowej Wystawy Wynalazczości i Postępu Technicznego we Wrocławiu", *Biuletyn Instytutu Urbanistyki i Architektury*, 1954, no. 6, p. 4.
- Witebski, Z., *Miejskowe materiały budowlane*, Warsaw, 1957.
- Wyganowski, Z., *Budynki z kamienia*, Warsaw, 1958.
- Wyganowski, Z., "'Tandom' pierwszy prefabrykowany ogniotrwały domek jednorodzinny", *Inżynieria i Budownictwo*, 1958, 15, no. 3, pp. 79–83.
- Wytyczne do założeń projektowych dla budownictwa niskiego z materiałów miejscowych*, Instytut Budownictwa Mieszkaniowego, Warsaw, 1957.

Abstract

The issue of construction materials was one of the essential topics that determined the architectural discourse of the Thaw era. Reminiscences of designers regarding the pre-war wealth of construction materials on offer, as contrasted with current scarcity, revealed the critical and ideologically subversive potential of this topic. This was because such statements not only questioned the "excellence of the way today's construction site is organised", eloquently promoted by the Stalinist propaganda, but also highlighted the actual meaninglessness of slogans regarding technological progress and the introduction of new materials into construction practice, which had been tooted since the latter half of 1953. In reality, the central point was cost-cutting, as shown by the parallel campaign undertaken by the authorities, advocating the use of "locally obtainable and waste materials", i.e. materials that could be acquired without putting a burden on the inefficient state industry.

At the same time, however, this campaign, initiated at the threshold of the Thaw, contained some interesting ideological themes, since in return for the dearth of materials, it offered the citizens a legal prospect of conducting – individually or cooperatively, but in each case independently from governmental control – activities aimed at assuaging their housing needs; this constituted a departure from the centralised model of housing construction as promoted in the Stalinist period. Also, small-size houses made of reed boards, which began to be manufactured at that time, turned the general attention to the applicability of lightweight prefabrication – significantly different from large-size concrete block prefabrication

promoted at the time following the Soviet models – in contemporary housing construction. A growing interest in, or even fascination with, individual house-building activity of the Polish population soon became evident in the milieus of construction experts and engineers. These feelings found their expression ca. 1958 in, on the one hand, numerous handbooks promoting the notion of a do-it-yourself house, and on the other, in far-reaching analyses of the “wild”, i.e. unauthorised, housing construction in Warsaw, treated as socially detrimental activity, but also as a testimony to the citizens’ spontaneity and creativity.

However, in a long-term perspective, it was hard to believe that “local and waste materials” would reduce the chasm between the still unmet needs of the population and the construction policy of the state. In the period of Gomułka’s government, the cost-cutting measures continued to be implemented, but the aspirations and needs of the citizens who undertook to build their own houses, as well as the ambitions of architects, were growing. This is well-documented by the 1964 contest for cost-effective single-family houses, where industrially produced construction materials predominated. Private construction was thus entering a grey zone, not covered by any economic concepts developed by the state; the time of fashioning houses out of clay was over and the époque of cement-stealing had begun.

Keywords: Poland – housing, Poland – 1945-1970, housing – local-material construction, Poland – rural housing, Poland – 20th century architecture, Poland – politics and architecture