

INVESTMENTS OF THE MILITARY ACCOMMODATION FUND IN THE CONTEXT OF BUILDING A MODERN STATE: ARCHITECTURE, IDEOLOGY AND SOCIAL SPACE OF THE SECOND POLISH REPUBLIC

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Abstract

The article examines the Military Accommodation Fund (FKW) as a centrally managed investment and construction system operating in the Second Polish Republic in the interwar period. It analyses the Fund's role in the standardization of residential and institutional buildings for the Polish Army between 1927 and 1937. Drawing on official reports and contemporary architectural sources, the article situates the Fund's investments within broader state-led modernization processes.

Keywords: Military Accommodation Fund, Second Polish Republic, FKW, authoritarian state, spatial ideology, Sanacja, standardization

1. INTRODUCTION

The Military Accommodation Fund (Fundusz Kwaterunku Wojskowego: FKW), established in 1927, was one of the most significant state-controlled investment instruments of the Second Polish Republic responsible for the construction of military housing and associated infrastructure. Although formally subordinated to the needs of the armed forces, its activity formed part of broader state-led modernization processes that intensified after the May Coup of 1926. The Fund coordinated the design, financing, and execution of residential buildings for officers and non-commissioned officers, contributing to the spatial consolidation of garrison towns and urban districts across the country. In practical terms, the activities of the FKW were oriented toward the rationalization and standardization of military construction. Its responsibilities included:

- standardization of building designs (barracks, officers' quarters, dormitories),
- establishment of functional and technical standards (e.g., floor area related to rank, sanitary facilities, utility installations),

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- coordination of investments across the country, including provincial capitals and strategically important garrison towns,
- construction of residential estates and selected public buildings for military and state administration personnel.

The main directions of urban planning in interwar Poland (1918–1939) reflected the ambitions of the newly re-established state, including modernization, territorial integration, and the consolidation of administrative authority. These priorities included the modernization of cities, the development of new districts, and the planning of Warsaw as the national capital. Within this framework, FKW investments formed part of a broader landscape of state-led construction initiatives. Unlike many civilian urban projects that remained unrealized due to financial or administrative constraints, FKW undertakings were typically executed efficiently, benefiting from centralized financing mechanisms and clear institutional subordination.

The FKW can therefore be understood as a key instrument of state spatial intervention in the Second Polish Republic. Through the combination of military, municipal, and state budget resources, the Fund enabled the centralization of investment processes, particularly in residential construction and technical infrastructure. This operational focus distinguishes FKW activity from contemporary symbolic and representational architectural programs, such as monumental state offices, commemorative architecture, and prestige urban schemes for the capital (e.g. like the Temple of Divine Providence, Ministry of Religious Affairs and Public Education building or the Marszałek Józef Piłsudski District) that often remained unrealized, situating the Fund's output within the material practice of state building rather than architectural representation.

The scholarly literature on the Military Accommodation Fund has expanded in recent years, encompassing legal, institutional, architectural, and urban-historical perspectives. Key contributions include studies by Alicja Szmelter[3], Marta Rudnicka-Bogusz[19, 27], and Bogdan Popławski[48], as well as broader analyses of state architecture in the Second Polish Republic by Jarosław Trybuś[2, 29], Michał Pszczółkowski[8, 47], Maria Jolanta Sołtysik [4, 5, 6, 11], Katarzyna Uchowicz [40], Dariusz [41] Błaszczuk, and contributors to collective volumes edited by Andrzej Szczerski [9, 36]. Together, these works provide an essential framework for understanding the institutional context, architectural forms, and ideological dimensions of interwar state-led construction. A synthetic overview of the FKW's institutional and legal foundations is provided by Andrzej Witkowski[26], who reconstructs the Fund's operating mechanisms, including its sources of financing, housing allocation procedures, and its relationship with the Ministry of Military Affairs. Witkowski characterizes the FKW as an efficient instrument of state housing policy, designed to balance military requirements with fiscal discipline and urban-planning considerations. This study remains a point of reference for subsequent research on the Fund's activities.

The analysis presented in this article covers the years 1927–1937, corresponding to the main period documented in the Fund's official reports [1]. Selected housing projects, architectural competitions, and statements by FKW officials are examined in order to assess the role of standardized architectural solutions and construction practices in shaping military housing and urban space. The article examines the Military Accommodation Fund as a centrally managed architectural and construction institution and explores the extent to which its standardized housing practices intersected with broader state-led modernization and ideological frameworks of the Sanacja period.

2. MATERIALS AND METHODS

The study employs a historical-analytical research method based on the systematic examination of primary and secondary sources related to the activities of the Military Accommodation Fund. The core source material consists of official FKW reports published between 1930 and 1938, which provide quantitative data on the number of buildings and dwellings constructed, investment volumes, construction costs, and standardized design solutions. These documents are treated as both administrative records and technical sources, enabling the reconstruction of the Fund's investment logic and construction practices.

In addition, the analysis draws on contemporary architectural journals, competition reports, and scholarly literature addressing interwar Polish architecture, urban planning, and state investment policy. Architectural projects are examined with particular attention to typification, repeatability of layouts, construction technologies, and sanitary standards. Selected case studies are used to illustrate how standardized solutions were adapted to different urban contexts while maintaining unified technical and functional principles.

The research does not involve experimental or material testing procedures; instead, it focuses on the interpretation of archival data and built examples in order to assess the operational role of architectural standardization in state-led construction. This approach allows for the evaluation of the FKW as an investment and construction system and for situating its architectural output within broader processes of infrastructural modernization in the Second Polish Republic.

3. RESULTS

After regaining independence in 1918, Poland faced the challenge of integrating the three former partitions, each of which had developed distinct legal systems, settlement networks, and infrastructure. Urban planning became a key instrument for building a cohesive national identity and for driving modernization. Efforts to unify spatial structures and to establish a coherent developmental trajectory reflected aspirations to construct a strong, centralized state [8: 35–76, 9].

Municipal and central authorities initiated regulatory plans and the development of new residential districts (including planned estates and administrative redevelopment concentrated in Warsaw [2,9] such as the Bank of National Economy (BGK) estates in the Koło district, as well as in other cities like Lwów, Kraków [43], Poznań [44] and Wilno [45]). At the same time, industrial cities associated with the Central Industrial Region (COP) and Upper Silesia experienced significant growth. Gdynia was also established - a flagship example of a modern port city built from scratch [10, 11: 158, 176].

Simultaneously, Warsaw was envisioned as the symbol of the modern state. Numerous ambitious and ultimately unrealized plans emerged, including monumental urban complexes, regulatory frameworks, and architectural competitions such as the Marszałek Józef Piłsudski District, Marszałkowska Avenue, and the headquarters of central institutions [2].

3.1 Stages and Contexts of the Transformation of the National Style

In the context of the urban planning directions adopted in the Second Polish Republic, stylistic transformations represent a dynamic shift of the national style—from symbolic, historicizing forms that expressed the identity of the new state to a modernist and functionalist aesthetic, reflecting progress, standardization, and modernity.

Initially - from 1921 (when public investment was still largely focused on reconstruction, prior to the signing of the Treaty of Riga) to the May Coup in 1926 - state-sponsored architecture was dominated by national traditionalism, also referred to as the “manor style”. It drew on motifs from Polish Enlightenment architecture and the romanticized vision of the noble manor house. This style carried strong symbolic meaning - it visualized state continuity, historical rootedness, and cultural independence [12: 22–37]. Typical features included mansard roofs, columned porticos and rusticated façades. It was especially common in the design of official seats of public institutional buildings. A representative example of manor-style rhetoric in state infrastructure is the Żyrardów railway station, erected in a manor idiom to designs by architects of the architectural section of the Road Department of the Warsaw Directorate, managed first by Bronisław Brochowicz-Rogoyski and later by Romuald Miller [46].

After 1926 - and especially following the May Coup - the national style gradually lost significance in favour of modernist architectural language. The Sanacja regime promoted utility, formal discipline, and rationality, which was reflected in architecture increasingly shaped by the principles of functionalism. Modern urban planning doctrines, such as those endorsed by CIAM, were applied to the design of workers’ and civil servants’ housing estates: simplified forms, geometric layouts, undecorated façades, and standardized housing types [9].

The national style persisted in sacred, residential, and partially military architecture, but more as a rhetorical gesture or stylistic delay than a dominant trend [8: 35–76]. Its enduring features - monumental scale and axial arrangements - were maintained as expressions of state ideology, as seen in ministerial buildings and housing projects of the FKW, for example, in the Okęcie district.

This shift—from representational “style” toward operational modernity implemented through military institutions—also frames an argument that military construction is read as a carrier of modernization logic rather than a purely formal vocabulary[47].

3.2 Military Housing Investments in the Context of Broader Trends

In the immediate post-independence period following 1918, Poland faced the urgent task of accommodating the vast number of soldiers involved in armed conflicts. To do so, it relied on existing Polish military barracks as well as those constructed by the former partitioning powers. This situation affected not only enlisted soldiers but also officers, non-commissioned officers, and their families, who were assigned quarters of varying standards, often dispersed across different parts of garrison towns.

It was only after the signing of the Treaty of Riga in 1921 and the resulting ceasefire that the Polish side was able to begin the demobilization of the army and its reorganization for peacetime. Alongside this reorganization, military authorities faced the challenge of providing suitable barracks and housing for soldiers and officers. In recognition of their service, the state began to treat military personnel as a distinct social class, elevating them to elite status. Officers were granted particular privileges, including access to specialist healthcare and dedicated housing.

Before the FKW began operating, military construction in the years 1921–1927 was largely based on historicist architectural principles. Examples of residential military architecture from this period include the officers’ housing estate and casino in Warsaw-Rembertów, constructed between 1922 and 1924 to designs by Kazimierz Mieszkis and Romuald Miller; the barracks and commander’s residence at the Ławica airfield in Poznań, designed by Adolf Piller (1923); and the naval barracks and fleet command complex in Gdynia-Oksywie, by Marian Lalewicz (1926–31). These designs were commissioned from selected architects by the Building Department, established in 1920 within the Ministry of Military Affairs (Ministerstwo Spraw Wojskowych; M.S.Wojsk.).

However, investments based on individual designs were only a drop in the bucket and progressed slowly. Under the applicable laws, municipal governments were required to provide housing to

individuals present in their territories due to “public duty” and to state institutions that “had no other means of acquiring premises” [13]. In cases where municipalities lacked the necessary space, private apartments were to be requisitioned. Yet there was concern that the scale of requisitions would discourage the already fragile commercial housing market, which was desperately needed in a country devastated by war. In response to the construction market crisis - with few completed apartments available and little ongoing investment - new legislation was adopted. It was proposed that, instead of the existing framework, the national budget should provide dedicated funding for the construction of military housing [14:125–148].

In 1925, the Act on Peacetime Military Accommodation (Dz.U. 1925 No. 97, item 681) was passed [15], establishing a dedicated institution: the FKW - although in practice the Fund did not begin operations until 1927. That same year, the Building Department created its own Design Bureau, which operated until 1931, in the hope of generating standardized, economical solutions, accelerating the design process, and reducing investment costs. Initially, the Bureau attempted to manage all design work in-house. However, due to the scope of projects, it was eventually forced to hire civilian architects—though it aimed to engage those of the highest reputation, such as Edgar Norwerth [16].

Military construction after 1918 extended beyond barracks to a broad infrastructural system (housing, training, health and mobility), making standardization a practical necessity rather than a purely stylistic choice. Moreover, both military personnel and civilians of working age required health recovery after years of war-related deprivation, poor hygiene, malnutrition, and lack of medical care. From 1925 onward [17], a policy of “social combat readiness” was implemented, which required all citizens to be fit for service. The M.S.Wojsk. thus established a public system of physical education combined with military preparatory training [18]. This policy led to the creation of physical education institutions, foremost among them the Central Institute of Physical Education built by Edgar Norwerth in Warsaw (e.g., the Center for Physical Education and Military Training in Kielce by Norwerth, and the Center in Kraków by Adolf Szyszko-Bohusz).

For the army, this policy also resulted in the development of a network of rest facilities - such as Norwerth’s Military Rest House in Truskawiec [19] - along with sports complexes, especially yachting centers (e.g., the Yacht Club in Zegrze by Czesław Stankiewicz, or the Officers’ Yacht Club of the Republic in Warsaw by Jerzy Nagórski), as well as sanatoriums and hospitals, including the Norwerth-designed facility in Otwock. These investments were overseen by the Building Department of the M.S.Wojsk. Even when these facilities were commissioned by the State Office for Physical Education and Military Training (Państwowy Urząd Wychowania Fizycznego i Przystosowania Wojskowego ; PUWFiPW), representatives of the Ministry of Military Affairs’s Building Department were involved in the design process [20].

In the face of such diversity and quantity of military construction, and in order to address the most pressing issue - military housing - FKW was officially launched in 1927 by decree of Marszałek Józef Piłsudski, based on the provisions of the 1925 Military Accommodation Act [21].

3.3 Financial–Technical Mechanisms Enabling Construction Scale

3.3.1 Creation and Initial Structure of the FKW (1927–1930)

The initial structure of the FKW was strictly subordinated to the M.S.Wojsk., which exercised substantive supervision and provided military personnel seconded to work for the Fund. However, the FKW enjoyed financial autonomy (a separate budget) and operational independence (managed by a General Board based in Warsaw), which enabled effective planning and implementation of its investments. The regulation that established the FKW defined its governing bodies, which included: the

Board, the Directorate (as the executive body of the Board), and the Audit Commission (the FKW's supervisory body). In the Fund's early period, the composition of the Board was designed to ensure the participation of representatives from key ministries and central and local government bodies.

According to the regulations, the Board was chaired by the Minister of Military Affairs (or his deputy) and included representatives of the Ministry of Military Affairs, the Treasury, Public Works, Internal Affairs, the Sejm, the Senate, and the Warsaw City Council [22:53–55]. This composition institutionalized cross-ministerial financial oversight and centralized decision-making authority over military housing investments.

In accordance with this structure, in 1927 the Board included: Chairman Brig. Gen. Jakub Krzemiński; Deputy Chairman Lt. Col. Feliks Kamiński; second M.S.Wojsk. delegate Eng. Zygmunt Wieliński; delegate of the Ministry of Public Works Eng. Tomasz Kudelski; delegate of the Ministry of Internal Affairs Tadeusz Teliga; Sejm delegate Eng. Kazimierz Rechowicz; Senate delegate Jan Szuścik; and delegate of the Warsaw City Council Władysław Tomaszewski [22: 53–55]. The organizational structure also included regional investment units and technical inspection offices.

The executive body of the FKW was the Directorate, composed of a General Director and a Technical Director, directly accountable to the Board. In 1927, these functions were performed by Eng. Leopold Toruń (General Director) and Eng. Emil Kaczyński (Technical Director). This dual structure separated administrative-financial supervision from technical-standardization oversight, enabling centralized coordination of design norms, budgeting, and construction control across all FKW investments.

From its inception, the FKW operated as a high-volume investment apparatus. The 1927–1930 report records the initiation of several dozen barracks complexes and officers' residential buildings within a centralized planning framework [23:14]. This early concentration of projects indicates that the Fund was conceived not as an advisory body but as an executing institution coordinating site selection, standardized design deployment, budget allocation, and construction supervision at national scale. Upon commencing operations in 1927, the FKW consolidated previously fragmented military construction projects under a single administrative and financial authority [23:14; 25]. Ongoing investments—such as the complexes in Poznań-Ławica and Gdynia-Oksywie—were transferred from dispersed military agencies to the Fund's centralized management structure. This institutional consolidation enabled unified cost control, standardized documentation procedures, coordinated contracting, and synchronized implementation schedules at national scale. Following the 1925 currency and banking crisis [24], numerous projects had stalled due to capital constraints and price instability. The FKW resumed suspended construction in July 1927 [25], introducing financial discipline and typified design schemes to replace costly individual commissions. At the outset, the Fund operated with only approximately one-quarter of the financial resources originally envisaged by statute. Its principal non-refundable income derived from the accommodation tax (4% of rental charges), introduced under the 1925 Act on Peacetime Military Accommodation [15]. However, the 2 August 1926 property tax reform reduced this revenue stream, effectively halving anticipated income, while the 1925 złoty devaluation simultaneously diminished purchasing power in the construction sector [24]. Consequently, early FKW reports emphasize cost compression strategies, standardized design replication, and life-cycle maintenance optimization as structural responses to constrained capital availability [23; 25].

Financial autonomy stabilized multi-year procurement cycles and enabled the enforcement of unified structural and installation standards across geographically dispersed sites, transforming military housing construction into a coordinated national system rather than a series of isolated commissions.

3.3.2 Consolidation and Investment Expansion Phase (1930–1933)

Between 1930 and 1933, the FKW underwent institutional consolidation and managerial professionalization. The 1930–1933 report records the formal division of operations into four specialized sections: planning and design, finance and credit, construction administration, and legal-administrative affairs [25].

The Fund also expanded its cooperation with local authorities, securing land and preferential conditions for housing projects. It used state-owned land or, if necessary, acquired it through expropriation. The FKW's role as a lender also grew, granting officers low-interest loans for purchasing apartments in FKW buildings. Construction financing during this phase was based on three principal sources: targeted state subsidies, loan amortization flows, and rental revenue from completed residential and commercial units [25].

As a result, the FKW began functioning as a quasi-investment bank, operating at the intersection of military policy, urban planning, and housing economics. Through centralized credit, design, and implementation management at the national scale, the Fund assumed roles typically performed by local governments in decentralized systems. It thus became a tool for centralizing investment decisions and redistributing state budget resources according to the strategic priorities of the M.S.Wojsk. and the Sanacja regime.

Personnel restructuring within the Board reflected increased institutional authority. The 1930–1933 report lists Gen. Emil Mecnarowski as chairman and Maj. Józef Wróblewski as vice-chair, alongside representatives of the Treasury, Internal Affairs, Parliament, the Warsaw City Council and the Bank of National Economy, which co-financed major investments [25]. This cross-institutional governance structure reinforced fiscal oversight while preserving centralized technical control, further stabilizing multi-year procurement cycles.

3.3.3 Peak of Activity and Systemic Maturation (1933–1937)

In its final operational phase (1933–1937), the FKW achieved full territorial and financial maturity. According to the comprehensive 1927–1937 report, the Fund operated through district-level implementation units in each military district coordinated by a centralized Board in Warsaw [1].

The structure of the Central Board comprised an Architectural-Technical Department responsible for design standardization, an Audit Commission overseeing legality and operational efficiency, and a Program Council composed of representatives from the General Staff, the Ministry of Military Affairs and selected civilian experts.

After initial financial difficulties, by the end of 1938, the FKW had become a liquid instrument, generating investment surpluses and reinvesting rental and credit income [26:564–575]. Reports mentioned cooperation with the Bank of National Economy, which increased the Fund's impact. These revenues, along with the Fund's authority to contract loans guaranteed by the government [23:6], allowed for large-scale construction. The maturation phase confirms that the FKW had evolved from an administratively supervised fund into a coordinated national construction system integrating financing, typified design, and territorial distribution.

At this stage Leopold Toruń was the main actor, responsible for developing normative frameworks and functional programs for military and residential buildings [27:210–229]. He introduced standardized designs for barracks, stables, garages, officers' residences, and NCO hotels, which were replicated in multiple locations throughout Poland. The catalog-based design system enabled implementation uniformity and cost reduction [23:45–47]. Under his leadership, the FKW developed material, modular, and technological guidelines. Toruń emphasized modern sanitary, fire safety, and installation standards, including central heating, sewage, and electricity, even in smaller towns, which

had a strong modernizing effect [25:33–37]. Toruń co-created the national FKW investment distribution strategy, aligned with both military requirements and the logic of peripheral modernization. The Fund invested not only in Warsaw, Kraków, and Lwów, but also in Pińsk, Grodno, Wilno, Przemyśl, and Brześć nad Bugiem [28]. Toruń consulted site plans with representatives of the General Staff, M.S.Wojsk., and the Ministry of Public Works' Department of Transportation [23], ensuring that FKW projects were consistent with state strategic and transport priorities [26].

3.4 Technical and Structural Standardization in FKW Housing

The financial consolidation of the Fundusz Kwaterunku Wojskowego (FKW) was inseparable from the development of unified structural and technical standards. The reports for 1927–1930 and 1930–1933 document the systematic implementation of repeatable construction systems for barracks, officers' housing and NCO residential buildings, based on standardized load-bearing schemes and modular dimensional coordination [23:45–47; 25:33–37]. Residential buildings were typically constructed using brick load-bearing wall systems combined with reinforced concrete, Westphala systems or Klein-type ceiling structures [23:29], standardized structural spans, modular window and door dimensions, and repeatable staircase cores and circulation layouts. Identical structural schemes were reproduced in multiple garrison towns—including Kowel, Płock and Stanisławów—with only minor adaptations to local site conditions. This confirms that FKW investments were not based on individual architectural commissions but on centrally coordinated engineering typologies. Typification therefore operated not only at the level of plan layout, but also through repeatable structural choices that stabilized estimation, procurement and execution across dispersed building sites.

Sanitary and installation standards constituted an equally important component of this technical unification. The FKW reports emphasize the systematic introduction of water supply and sewage systems, central heating installations, electrical and gas networks (where available), mechanical laundries, drying rooms and standardized sanitary facilities calibrated to rank-based apartment categories [25:33–37; 33]. This installation package defines a technical baseline for “modern housing” implemented as policy: hygiene and infrastructure were embedded in the housing type rather than treated as optional upgrades.

The combination of centralized governance, technical baselines and typification mechanisms translated directly into measurable construction capacity. By 1938, FKW documentation recorded 5,760 completed apartments for officers and married NCOs and 1,574 units under construction, yielding a total of 7,334 apartments realized or in progress within the 1927–1937 program cycle [1:26]. These figures demonstrate that typification was not a marginal design preference but the operative basis of large-scale housing production.

The scale of implementation was made possible by a stabilized financial structure. Total accommodation tax revenue reached 114,174,379 zł in 1938 [26:564], and the Fund was authorized to contract loans up to 140 million zł guaranteed by the state [23:6]. This financial capacity enabled multi-year procurement planning, centralized material purchasing and coordinated execution across geographically dispersed sites. Financial autonomy therefore functioned not merely as an administrative privilege but as the enabling condition for enforcing unified technical norms nationwide.

Technical control was institutionalized through the Architectural-Technical Department, which supervised catalog-based typified documentation, enforced rank-based apartment size regulations [33], and standardized cost-per-square-meter calculations [1, 23; 25]. Through this integrated system of structural typification, sanitary modernization and centralized financing, the FKW operated as a coordinated national construction apparatus. Engineering standardization, fiscal discipline and spatial replication functioned as interdependent mechanisms that enabled the realization of housing at a scale

unprecedented in interwar Polish military construction. In the foreword to the 1927–1937 report, its compiler, Marek Leykam, wrote: “The types and norms we created played a very important role in this sector of national economy” [1:VII].

3.5 Military Modernism as a Form of Spatial Ideology

After the May Coup of 1926, military architecture—like other domains of material culture - became subordinated to the idea of constructing a new state: hierarchical, modern, hygienic, and rational. This event marked not only a political turning point but also an ideological and administrative one, leading to the gradual reconstruction of state structures according to the principles of so-called Sanacja. During the Sanacja period, culture became a key tool in crafting the image of a politically strong and intensively modernizing state. Particular emphasis was also placed on exhibitions organized across the country, especially those held in Warsaw, such as the International Exhibition of Modern Architecture and two shows organized under the patronage of Stefan Starzyński: *Warszawa przyszłości* (1936) and *Warszawa: wczoraj, dziś, jutro* (1938) [29: 4–17].

In the context of architecture and urban planning, this meant:

- centralization and subordination to state policy - including in public construction and investment;
- instrumentalization of architecture as a didactic and ideological tool;
- promotion of selected values (order, discipline, hygiene, hierarchy) that were meant to support a new model of citizenship and society.

The launch of funding for the Fund by a special decree of the Marszałek Józef Piłsudski fits within the framework of Sanacja ideology and authoritarian modernization projects [30: 7–25]. Alongside the Warsaw Housing Cooperative (WSM) and civil service housing colonies, the FKW became part of the Sanacja model of “modernization under control,” where the state not only provided housing but also shaped the lifestyle of its residents. FKW framed design policy as bounded freedom: architects were given formal latitude while constrained by basic construction principles and financial limits [23:61]. This meant standardization-by-governance: performance (cost, hygiene, construction rules) was standardized centrally while stylistic language varied within a controlled technical envelope.

Jarosław Trybuś highlights the centralist ambitions of authorities toward Warsaw as the capital. Similarly, the activities of the FKW can be interpreted as a mechanism for extending this centralization across all of Poland through the construction of housing estates and garrisons in medium-sized cities (e.g., Przemyśl, Brześć, Grodno, Lublin). The FKW aligned with a broader paradigm of centrally planned modernization, analogous to the one that Trybuś identifies in Warsaw's urban planning projects. He demonstrates how the unexecuted plans for Warsaw served to construct a symbolic spatial order. The FKW fulfilled a similar role - albeit implemented in practice - by creating housing estates aligned with the narrative of a modern, disciplined, technocratic state. Both in Warsaw's unrealized plans and in the FKW's national-scale operations, one can observe a common logic of modernization through standardization, spatial control, and architectural subordination to state interests. While many ambitious modernization concepts for the capital remained on paper, the FKW not only designed but effectively implemented large-scale investments throughout the country.

Military housing estates were characterized by typification, compositional order, access to social infrastructure (schools, shops, community centers), and clearly defined divisions between private and public space. These features had not only practical value but also constituted a spatial representation of moral and social order. Military modernism promoted values of discipline, collectivism, and functionalism - closely aligned with the Sanacja doctrine [31].

The FKW's operations were part of a broader policy of shaping civil society according to a militarized, statist model. Military residential architecture was not neutral: it created closed social enclaves inhabited by families associated with the army, fostering loyalty and a service ethos.

Such estates also became models of everyday life: modes of living, home space organization, and daily routines - all conformed to principles of order and functionality. This had an educational and disciplinary role, shaping new civic patterns [32].

The Fund maintained a catalog of standard designs for different categories of officers and non-commissioned officers, which contributed not only to cost rationalization but also to the standardization of aesthetic and social styles. The geographic distribution of investments—from major cities to borderland garrisons—was an element of territorial integration policy and symbolic state presence.

Trybuś observes that many modernist projects of the 1920s and 1930s were characterized by “apparent anonymity,” stemming from the pursuit of functional rationalization. A similar mechanism can be seen in the FKW's designs, which employed typification as a tool for cost control and ideological uniformity. This led to the creation of buildings with a unified aesthetic and a clear military -state function.

3.6 The Influence of the Military Accommodation Fund on Urbanism and Social Structure

3.6.1 The FKW's Housing Design Competitions

Architectural competitions organized by FKW were among the earliest of their kind in interwar Poland. To situate FKW competitions within the wider interwar competition field, the chronology is reconstructed by cross-reading FKW reports with the national competition register compiled by Olgierd Czerner where the 1928 FKW competition appears in the sequence of typological housing competitions. A chronological analysis confirms that the said competition was the sixth competition held in independent Poland and the third focused on typifying projects—following the 1920 competition for worker housing in suburban colonies and the 1926 competition for inexpensive housing related to the Eastern Fair in Lwów [42:5]. It is also worth noting that the WSM estate in Rakowiec was only realized in the 1930s.

The Fund granted designers a significant degree of creative freedom, in line with the credo: “We left architects complete freedom in design... we imposed only the basic construction principles and those limits required by the financial resources we had for construction” [23]. Design guidelines were based on criteria set by the Regulation of the Council of Ministers of 29 August 1927 on the size of permanent quarters and fees for permanent quarters in barracks or state-owned or leased buildings [33].

Lower-ranking non-commissioned officers (corporals, sergeants) were entitled to apartments of up to 30 m² (a room and a kitchen), while senior NCOs were granted 50 m² (two rooms and a kitchen). Married junior officers (up to the rank of captain) were entitled to apartments comprising three rooms, a bathroom, and a kitchen, totaling 90 m². Majors and lieutenant colonels were eligible for four-room apartments with a kitchen and bathroom, totaling 120 m². Both officers' and NCOs' housing blocks included shared laundry facilities. Some featured mechanical laundries, drying rooms, and ironing rooms. All buildings were equipped with water, sewage, electricity, and gas installations where available. In the 1930s, collective antennas became part of the standard equipment. It can therefore be argued that military housing was not only among the most numerous government investments but also led the stylistic avant-garde.



Fig. 1. Włodzimierz Padlewski (1928), standard residential building for officers and NCOs, realized in Stanisławów (left) and Przemyśl (right). Elaborated by author on the basis of: Report of the Military Accommodation Fund 1927–1930 (Warsaw, 1930)

The first competition organized by the FKW in 1928 was won by Włodzimierz Padlewski. His project was stylistically conservative with expressionist details: a triangular crowning over the staircase window niche, adorned with a diamond-patterned panel (Fig. 1). Padlewski designed a two-segment, three-story brick building with Klein ceiling construction. Each section contained two cross-ventilated, three-room apartments with balconies. All apartments had identical dimensions (65.9 m²). The building included two laundry rooms in the basement and was fully equipped with plumbing, sewage, electricity, and gas systems. This design was implemented in both Stanisławów and Przemyśl.



Fig. 2. Marian Nikodemowicz (1928), apartment block for officers in Lwów. Source: Residential Buildings of the Military Accommodation Fund 1927-1937 (Warsaw 1938).

Another way to ensure high-quality design, especially in prestigious locations, was to hold limited competitions, inviting only reputable architects. In 1928, the Fund organized a competition for an officer apartment block in Lwów at Zybkievicza Street (now Franki Street, Fig. 2). The winning design by Marian Nikodemowicz and Wilhelm Sawczyk featured a five-story, three-winged building with an

arched passage to the courtyard and a tall, gabled roof. The building's style was visibly simplified but still traditionalist. The jury criticized the insufficient sunlight and lack of modular standardization of building elements. However, this was due to constraints imposed by the Lwów municipal authorities. Since the complex occupied a complete plot between Zybkiewicza and Jabłonowskich Streets, it had to include a pedestrian path between these major thoroughfares. The housing blocks were oriented toward this pedestrian axis, with entrances to the segments located on the internal courtyard side. The project envisioned 93 apartments: 33 two-room, 43 three-room, 13 four-room, and 4 five-room units. The smallest, two-room apartments measured 51 m².

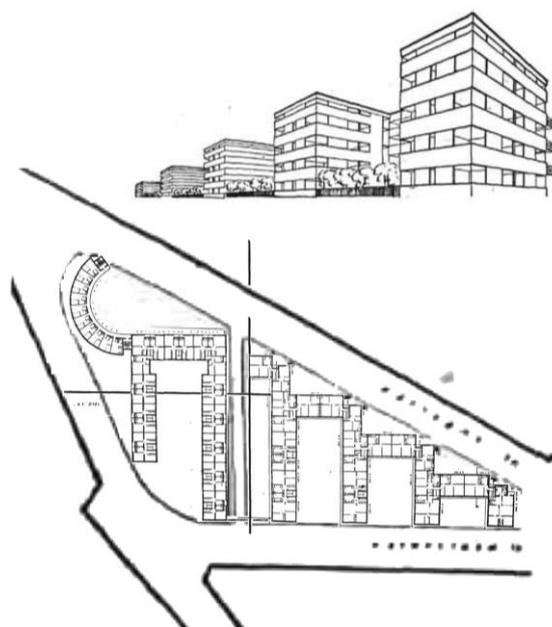


Fig. 3. Bohdan Lachert, Józef Szanajca, Włodzimierz Winkler, competition entry for officer and NCO housing complex in Kraków; first prize. Elaborated by author on the basis of *Architecture and Construction*, vol. 5, no. 2–3, 1929

he *Międzynarodowa Wystawa Architektury Nowoczesnej*, held in February 1926 in Warsaw, contributed to the development of a Polish theory of social housing and efforts to implement it in practice. However, in these early competitions of 1928, the juries remained fairly conservative. A transitional example is the open competition for a housing complex for officers and NCOs in Kraków, at 9 Śląska Street. The competition guidelines required the building to be at least three stories high, include indoor toilets, and strongly emphasized typification - “so that building elements, windows, doors, beam lengths, etc., were standardized.” Bohdan Lachert, Józef Szanajca, and Włodzimierz Winkler won first prize for their bold, functionalist design reminiscent of the 1928 Konstantynów Polesie competition (author’s note; Fig. 3).

However, the more traditionalist design by Bolesław Handelsman-Targowski (Fig. 4) was selected for execution. The elevations featured simplified pilasters and a triangular pediment adorned with a bas-relief. Completed in 1931, the complex comprised 85 apartments: luxurious five-room flats of 148.8 m², four-room (114.6 m²), three-room (71.4 m²), and two-room cross-ventilated units of up to 50 m², as well as one-room flats with kitchen and bathroom (up to 25 m²). Analysis of projects from this period reveals a pattern of moderate functionalism combined with conservative expressionist styling preferred in early military constructions.

The jury - Rudolf Świerczyński, Czesław Przybylski, and Kazimierz Tołłoczko - were fully capable of recognizing the potential in bold modernist designs. However, surveys of future residents indicated that the FKW's primary task was to ensure hygienic living conditions - not to educate tastes - and residents generally rejected radical functionalist aesthetics. Project selection was often based not on aesthetics but on cost-effectiveness - second-prize proposals were implemented if they yielded savings [25].



Fig. 4. Bolesław Handelsman-Targowski, design for a complex of officers' and NCOs' residences in Kraków; based on competition entry (Second Prize). Source: Report of the Military Accommodation Fund 1927–1930 (Warsaw 1930)

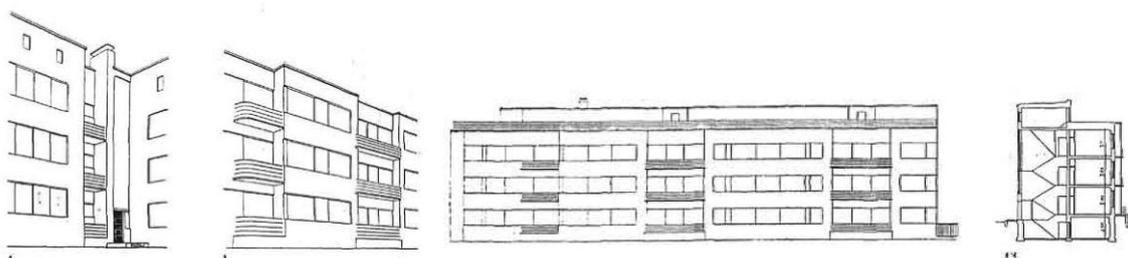


Fig. 5. Bohdan Lachert, Józef Szanajca, and Włodzimierz Winkler, competition entry for officers' and NCOs' housing complex in Bielsko; First Prize. Elaborated by author on the basis of: *Architecture and Construction*, vol. 5, nos. 2–3, 1929

Similarly, in the 1928 competition for a military building at 70 Sobieskiego Street in Bielsko, the winning functionalist design by Lachert, Szanajca, and Winkler (Fig. 5) was passed over in favor of a traditionalist design by Alfred Wiederman (Fig. 6). The rectangular two-staircase structure was visually divided by recessed balconies. Horizontal bands of windows and cantilevered balcony railings emphasized the façade's linearity, and the building featured a flat roof, presenting a bright, ascetic

appearance. Nevertheless, in this competition Lachert, Szanajca, and Winkler also received second prize for a striking Streamline Moderne design (Fig. 7), bearing resemblance to the transatlantic style: rounded corner projections and horizontal window bands giving an aerodynamic look. It abandoned historicist details in favor of simplicity and functionality. If constructed, this building would have lined up with Streamline Moderne examples such as Erich Mendelsohn's Petersdorff Department Store in Wrocław (1927–28), preceding Warsaw's Wedel building on Puławska Street (1935), as well as Gdynia's Kamienica Pręczkowskiego (1936), former ZUS building (1935–36), and Orłowski tenement (1936). The built design was expressionist, with triangular bay windows, stepped window frames in stairwells, stylized crystal motifs at entry portals, corner balconies supported by massive columns, and rustication above the cornice to create a deep chiaroscuro effect. Made of brick with reinforced-concrete floors, it contained 25 cross-ventilated apartments: five-room (131.6 m²), three-room (80.6 m²), and two-room (59.4 m²).

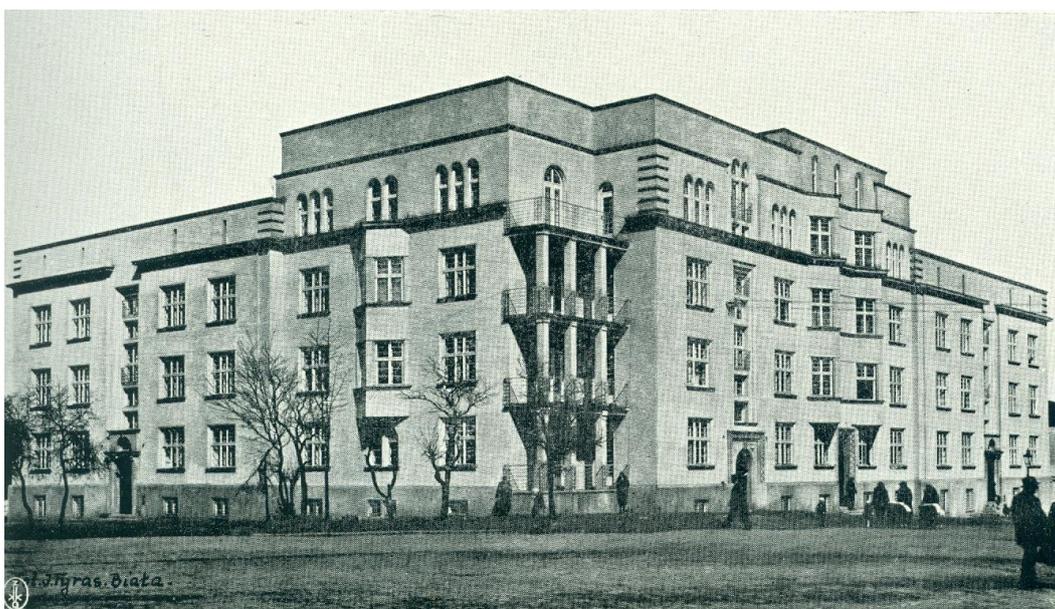


Fig. 6. Alfred Wiederman, officers' and NCOs' housing complex in Bielsko at Sobieskiego 70. Source: *Architecture and Construction*, vol. 5, nos. 2–3, 1929

Despite these choices, a creeping revolution ensued. By the early 1930s, military construction had broken away from the “manor style”. By 1933, the M.S.Wojsk. had employed over 50 young architects. Typification took hold, producing ergonomic and economical designs. The typical NCO house by Lachert and Szanajca, built in 1929 in Kovel and replicated in Stanisławów and Płock (Fig. 8), was an 18-family, three-story, basement-levelled building with three segments. Each segment had two cross-ventilated flats. All apartments, including end units, were identical: two rooms, hall, kitchen with pantry, bathroom/WC, and balcony. The elevations lacked decorative details and were shaped solely by tectonic modulation—varying heights and recessed volumes—creating a chiaroscuro effect rather than ornament.

Lachert and Szanajca also designed a 12-family officers' house, executed in Kovel and Płock in 1929 (Fig. 9). This three-story building featured four flats per floor, each containing three rooms, hall, bathroom/WC, kitchen with pantry and service alcove. Every flat included a balcony. Cellars were under

one wing only; attics contained drying rooms and laundry equipment. Floors used Klein ceiling systems—oak parquet in living spaces and pine in kitchens. The exterior was lime-cement rendered. The building had full water-sewer and electrical installations.

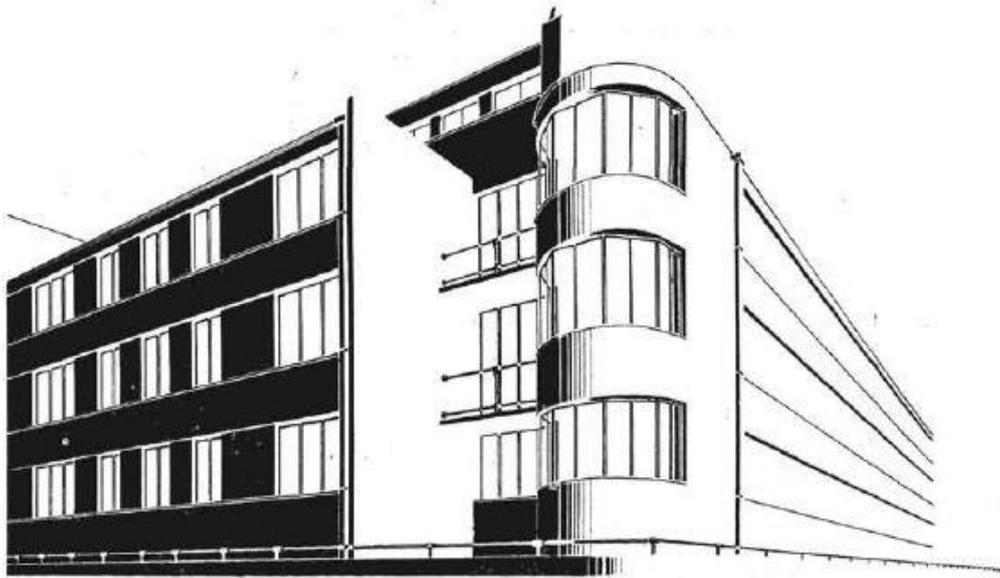


Fig. 7. Lachert, Szanajca & Winkler's second-prize entry for Bielsko (Streamline Moderne)



Fig. 8. Bohdan Lachert and Józef Szanajca, design for a standard NCO residential building, constructed in 1929 in Kovel and replicated in Stanisławów and Płock. Source: Report of the Military Accommodation Fund 1927–1930 (Warsaw 1930)



Fig. 9. Bohdan Lachert and Józef Szanajca, design for a standard officers' residential building, constructed in 1929 in Kovel and Płock. Source: Report of the Military Accommodation Fund 1927–1930 (Warsaw 1930)



Fig. 10. Romuald Gutt and Józef Jankowski (1929), officers' residential building at 54 Wiśniowa Street, Warsaw. Source: Residential Buildings of the Military Accommodation Fund. Report 1930–1933 (Warsaw 1934)

The use of functionalist style helped to universalize the architectural language and facilitated the reuse of designs in multiple locations. Repetition of model solutions selected in competitions accelerated the FKW's construction activity significantly. One example of conservative functionalism is the 1929

multi-family residential building for officers by Romuald Gutt and Józef Jankowski at 54 Wiśniowa Street in Warsaw (Fig. 10), whose design was later adapted for an NCO residential building at 4 R. Krajewskiego Street in 1931 (Fig. 11).



Fig. 11. Romuald Gutt and Józef Jankowski (1929), NCO residential building of the Military Accommodation Fund at 4 R. Krajewskiego Street, Warsaw. Source: *Architecture and Construction*, vol. 9, no. 2, 1933

Functionalism also began to appear in smaller towns, accelerating spatial development in the provinces. Thanks to this approach, the standard NCO house designed by Kazimierz Tołoczko for Bielsko in 1929 was replicated between 1929 and 1933, with only minor adaptations, in Brześć, Grajewo, Jarosław, Suwałki, Lublin, Skierniewice, Toruń, and Bydgoszcz. All these designs aimed to create an ergonomic, healthy, and economical layout that could be easily adapted to local conditions (Fig. 12).



Fig. 12. Kazimierz Tołłoczko, standard NCO house for Brześć. Source: Report of the Military Accommodation Fund 1927–1930 (Warsaw 1930)

Around 1932, the new architectural doctrine was also applied to prestigious urban locations. A prime example is the FKW investment in Warsaw in the block bounded by Koszykowa, Sucha, Nowowiejska Streets and the newly redeveloped North–South axis (Aleja Niepodległości). Two architectural competitions were held to select the best urban design solution.

As a result of the first competition, a housing block designed by Romuald Gutt and Józef Jankowski was built between 1931 and 1933 at the corner of Topolowa and Koszykowa Streets. The second competition led to the realization of Jan Reda's project between 1932 and 1935 at the corner of Nowowiejska and Sucha Streets. These were among the largest FKW construction undertakings, featuring high-density development. The Koszykowa complex comprised 164 apartments across 13 segments ranging from 6 to 7 stories, while the Sucha complex contained 93 apartments in 9 segments from 5 to 6 stories high. Both exemplified a functionalist approach to multi-family housing based on repeatable modular segments. Despite the time difference in construction, both projects shared many characteristics, including the placement of architectural accents on corners and a stepped corner composition (Fig. 13).



Fig. 13. Romuald Gutt and Józef Jankowski (1932), NCO residential building of the Military Accommodation Fund on Koszykowa Street, Warsaw. Source: Residential Buildings of the Military Accommodation Fund. Report 1930–1933 (Warsaw 1934)



Fig. 14. Jan Reda (1933), NCO residential building of the Military Accommodation Fund on Sucha Street, Warsaw. Source: Residential Buildings of the Military Accommodation Fund. Report 1930–1933 (Warsaw 1934)



Fig. 15. Jan Reda, Romuald Gutt, and Józef Jankowski (1933), FKW residential complex at the intersection of Sucha and Koszykowa Streets, Warsaw. Source: Residential Buildings of the Military Accommodation Fund. Report 1930–1933 (Warsaw 1934)

The façades of the building complex on Koszykowa Street were faced with cement blocks, while those on Sucha Street were clad in clinker brick (Fig. 14). Both complexes represent the same functionalist approach. The new design style is evident in the cuboid shapes of the buildings, devoid of any decorative details, with balconies and tectonically shaped gateway openings on the courtyard-facing façades (Fig. 15). The layouts of the apartments were also designed with residents' comfort in mind. Each section included only two cross-ventilated apartments with three or four rooms. Due to their location, the buildings comprise both east–west and north–south oriented segments, so apartment layouts were functionally zoned rather than based strictly on sunlight exposure. Bathrooms, kitchens, and adjoining servant quarters were located near the entrance. Kitchens were designed to minimal dimensions, intended solely for cooking, unlike the then-common “living kitchens”. The size of the apartments in the Koszykowa complex ranged from 89 to 115 m², and in the Sucha complex from 83 to 96 m². Due to the height of the buildings, they were equipped with elevators, significantly improving the standard. The standards established in the early years of the FKW’s operation were maintained throughout its subsequent activities across the Republic.

3.6.2 Commissioned Investments

In its initial phase, the Fund focused exclusively on constructing housing for military personnel. The success of these projects led the Fund, during its second reporting period (1930–1933), to undertake buildings commissioned by other ministries. Apart from a shortage of housing, military families suffered primarily from health issues, such as pulmonary diseases and rickets. To address these problems, the Fund also began constructing medical facilities.

Standardization became a crucial aspect of rationalizing medical construction in the Second Republic and proved particularly effective in the development of military hospitals and outpatient clinics. Modernist functionalism - with its emphasis on clear spatial arrangements and efficient use of

space - was ideally suited to the needs of medical institutions. Once the basic functional layout of an outpatient clinic was designed, it could be easily expanded into a full hospital building by adding storeys to the individual wings without altering the core spatial configuration.

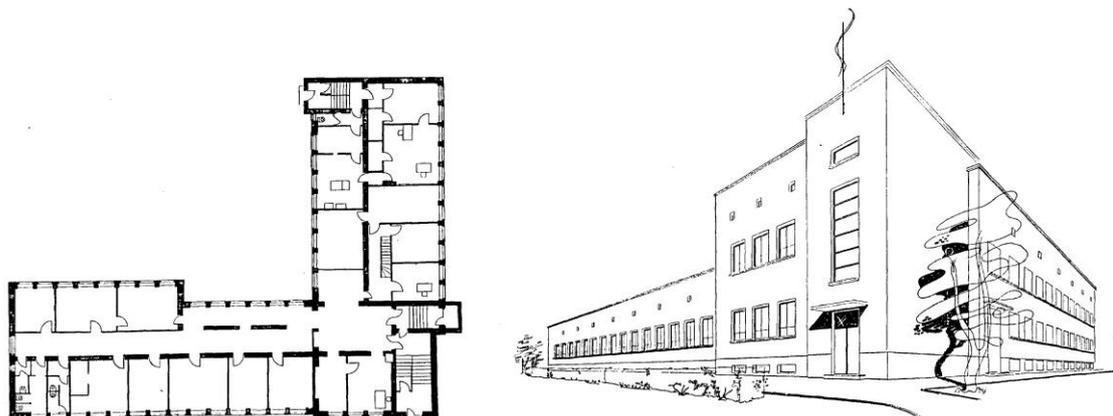


Fig. 16. Edward Michalski, hospital design in Pionki. Source: Residential Buildings of the Military Accommodation Fund 1927-1937 (Warsaw 1938)

Examples include outpatient clinics in Pionki and Skarżysko designed by Edward Michalski, as well as the hospital in Radom, designed by engineer-architect Jan Kukulski and Prof. Gustaw Trzciński. These buildings exemplify the functional approach to interwar medical architecture, with a strong emphasis on ergonomics, hygiene, and a clear separation of treatment, administrative, and auxiliary functions (Fig. 16).

The clinics were designed on an L-shaped plan, with a centrally located staircase and main entrance at the junction of the two wings. The two-storey wing housed patient rooms, while the perpendicular wing contained administrative offices and examination rooms. The 1937 design for the Pionki clinic was mirrored and reused in the same year in Skarżysko, illustrating the drive for repeatability and optimization of the design process (Fig. 17).

The garrison hospital in Radom (now named after Tytus Chałubiński), completed in 1938 to the design of Jan Kukulski and Gustaw Trzciński, represented a further development of this spatial scheme, built as a three-storey facility. The patient rooms and bathrooms were located in the wings on the upper floors, while the central section housed a medical assistance hall near the staircase. The ground floor accommodated administration offices, the outpatient clinic, and the administrator's apartment. All technical and auxiliary installations were located in the basement, contributing to a clear organizational structure and high hygienic standards.

These examples demonstrate not only the effective application of modern design principles but also the deliberate and systematic implementation of a standardization strategy in interwar Polish healthcare architecture. These efforts aimed to create a network of modern medical facilities meeting the needs of both military personnel and civilians while maintaining economic efficiency and architectural coherence.

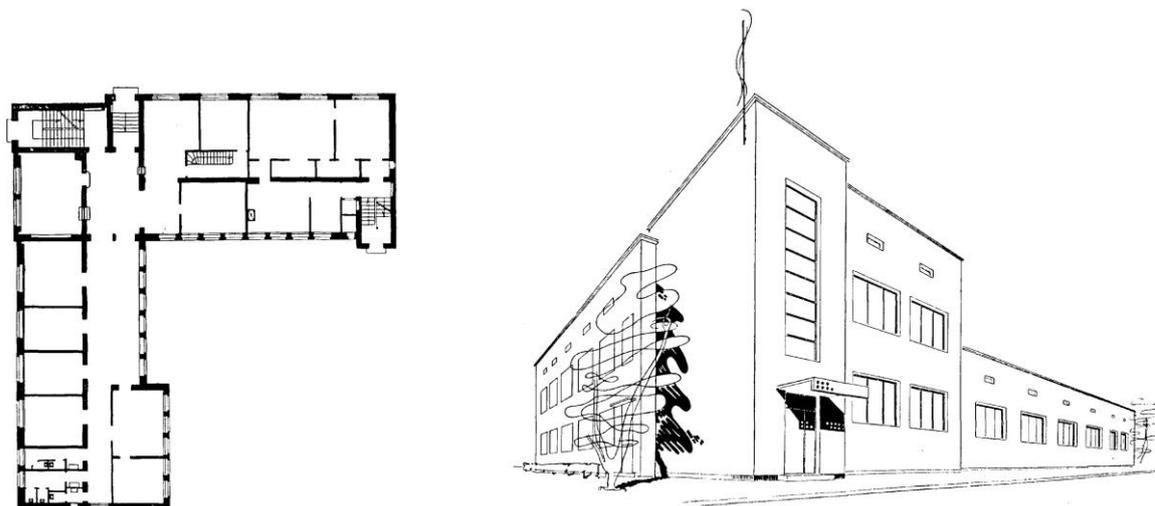


Fig. 17. Edward Michalski, design for the outpatient clinic in Skarżysko. Source: Residential Buildings of the Military Accommodation Fund 1927-1937 (Warsaw 1938)

Among the healthcare facilities, one can distinguish between basic medical care buildings and prestige projects. The latter category includes the Military Sanatorium in Otwock, designed by Edgar Norwerth, which exemplifies an ultra-modern approach to therapeutic architecture—especially considering it was built in the 1920s. Stylistically, the Otwock sanatorium resembles the Paimio Sanatorium designed by Alvar Aalto and completed two years earlier. It displays many references to the Streamline Moderne style: rounded corners, cascading rooftop terraces, and more. The building was planned according to a functional layout aligned with contemporary medical technologies and the specifics of treating pulmonary diseases, including tuberculosis.

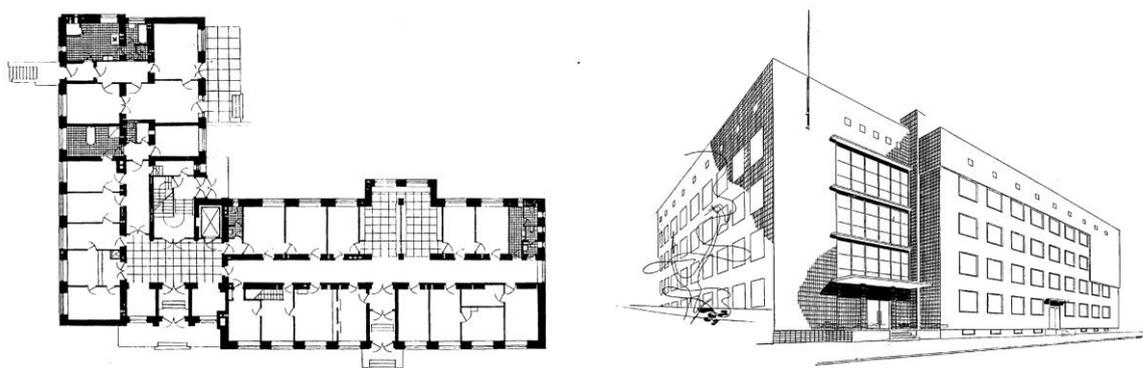


Fig. 18. Jan Kukulski and Gustaw Trzcíński design for the hospital in Radom. Source: Residential Buildings of the Military Accommodation Fund 1927-1937 (Warsaw 1938)

This investment represented a prestigious undertaking of strategic importance for the military healthcare system, aimed at creating a modern medical facility on par with the best European models. The construction of the Military Sanatorium in Otwock was initiated by the Head of the Military Health Department, General Dr. Roupper, in cooperation with General Langner, Deputy Head of Army

Administration, and with the approval of the Deputy Minister of Military Affairs, General Dr. Sławoj-Składkowski. To ensure the highest functional and architectural standards, the Health Department conducted in-depth studies on contemporary sanatorium architecture. Delegations reviewed leading tuberculosis treatment solutions by visiting prominent sanatorium facilities in Switzerland, Italy, Austria, France, and Denmark.

The core of the building was a single-corridor longitudinal block, to which a double-corridor section was attached on one side. This section housed the main entrance hall and administrative rooms on the ground floor, with medical offices, surgical rooms, and the main staircase on the upper floors. On the opposite end was another wing serving staff functions, ending with a spacious sun terrace intended for patients.

The sanatorium was designed in accordance with the latest medical architecture standards of the time. It could accommodate up to 120 patients in 52 patient rooms, including 12 single, 36 double, and 4 four-bed rooms. Additionally, the facility contained administrative offices, medical examination rooms, a fully equipped operating theatre, an X-ray suite, a pneumothorax treatment room, a pharmacy, a laboratory, two dining rooms, a conference hall, and a chapel.

Each floor was equipped with two spacious verandas, each capable of accommodating up to 30 reclining chairs, greatly enhancing open-air therapy. Moreover, 16 rooms featured balconies large enough to allow hospital beds to be moved outdoors. For patients suffering from bone tuberculosis, a separate sun-facing open veranda was provided.

3.6.3 Civilian Buildings

The esteem and influence of the FKW were clearly evidenced by commissions from key state institutions—such as the Supreme Audit Office, the Ministry of the Treasury, the Military Geographical Institute, and the Ministry of Justice—to build their headquarters and several district courts, financed from their own budgets. The Naval Command Headquarters in Warsaw, located on Wawelska Street, was designed by Rudolf Świerczyński. It was the first freestanding building in Warsaw constructed according to modern urban planning principles. Its plan was based on a cross-shaped layout, with stairwells and elevators located at the intersection of circulation paths. The building was constructed using a skeletal system with iron columns as the load-bearing structure. Its volume was enhanced by raising the wing perpendicular to the street by half a storey. The entrance area was highlighted by recessing the ground floor of this wing and supporting it on pillars that extended upward to form pilasters reaching the cornice. For economic and functional reasons, the building also included an admiral's apartment and office with separate entrances, in addition to single-sided office spaces. Due to the FKW's high investment efficiency, institutions such as the Supreme Audit Office, the Ministry of the Treasury, and the Ministry of Justice entrusted it with the construction of their official buildings.

One of the most emblematic examples of the FKW's activity was the design and construction of a service-housing estate in Nisko, which later became an integral part of the newly founded city of Stalowa Wola. This project, implemented between 1928 and 1934, took the form of a comprehensive urban plan aligned with the garden city concept, incorporating clear functional and social zoning. The estate included housing for civil servants and workers, as well as premises for commercial and service functions, and a tavern. The project was designed by architects Bronisław Rudziński and Jadwiga Nettowa, who consistently applied principles of functionalist modernism: simplified forms, standardized housing types, logical spatial connections, and modern technical installations. The estate was laid out in linear bands with internal alleys, squares, and green spaces, making it a model example of modernist military urbanism. Importantly, this layout later served as a template for the urban development of

Stalowa Wola—one of the key cities in the Central Industrial District (COP) of interwar Poland [23, 34, 35].



Fig. 20. Map showing the completed residential investments of FKW. Source: Residential Buildings of the Military Accommodation Fund 1927-1937 (Warsaw 1938)

4. DISCUSSION

The findings presented above can be situated within a broader body of scholarship on interwar architecture, typification, and modernization in the Second Polish Republic. Although much of this literature does not address the Military Accommodation Fund directly, it provides an essential interpretive framework for understanding the architectural and spatial logic underlying FKW investments [2,7,8,9]. The existing body of research on the Military Accommodation Fund has focused predominantly on architectural documentation and institutional history [26,3,27]. The results presented in this study extend these approaches by situating FKW activity within broader frameworks of interwar state-incited modernization, architectural standardization, and spatial governance.

Taken together, the organizational structure, standardized architectural solutions, and spatial distribution of FKW investments suggest that the Fund functioned not merely as an institution addressing the housing demands of the military, but as an instrument of state-driven modernization and spatial ordering [1,2,7,8,9]. By embedding discipline, hierarchy, and functional order into everyday living environments, FKW architecture contributed to the articulation of a specific model of military citizenship aligned with the ideological framework of the Sanacja regime [7,8,30,31,32].

FKW operated as a technocratic arm of the authoritarian state, in which centralized planning, financing, and execution constituted key mechanisms for implementing ideas of modernity and spatial order [26,30]. This interpretation corresponds with broader analyses of interwar institutional architecture, in which modernization was understood not only as a stylistic transformation but also as a tool for organizing social relations and exercising power through space [8,9,12].

Michał Pszczółkowski demonstrates that public and institutional architecture of the Second Polish Republic functioned as a carrier of modernization policy and state ideology, emphasizing the interdependence of function and form [8]. In this reading, modernity appears both as an aesthetic discipline and as an organizational instrument structuring behavior, hierarchy, and authority in space. Public utility buildings—such as schools, offices, and post offices—were frequently designed using legible symbolic codes that articulated the presence of the state in everyday environments [12].

Importantly, Pszczółkowski's later study [47] further reinforces this interpretation by examining the visual and spatial language of military architecture as a distinct yet integral component of interwar state modernism. In this work, military construction is not treated as peripheral infrastructure but as a consciously shaped architectural field through which the state articulated authority, discipline, and national identity. This perspective directly supports the reading of FKW housing and barracks as architectural instruments of ideological formation rather than purely functional facilities.

The findings of the present study allow FKW construction to be placed within this same category of state-sponsored architecture. Barracks, officers' housing, and military estates—although rarely classified as public utility architecture—fulfilled comparable organizational and representational roles. Their spatial zoning, façade hierarchies, standardized layouts, and controlled circulation combined functional efficiency with symbolic expression, reinforcing desired civic attitudes and disciplinary norms [3,7, 8].

The concept of “state modernism,” introduced and elaborated in the *Modernizmy* volumes, provides a useful framework for interpreting these processes [9,12,36–40]. State modernism describes a model of architecture subordinated to centralization, rationalization, and administrative control, in which modernity operates as a political and organizational project. Although the FKW is rarely treated as a primary subject in these studies, its architectural output fits squarely within this model, representing the military counterpart to civilian public construction and reinforcing the role of architecture as a tool of governance rather than solely an object of formal expression. Within this framework, FKW investments emerge not as peripheral military infrastructure but as one of the most consistent realizations of state modernism in interwar Poland—centrally planned, subordinated to military service, but also imbued with the ideology of organization, hierarchy, and modern citizenship [8, 9].

The contrast between planned modernization and executed construction is a recurring theme in scholarship on interwar Warsaw and other Polish cities. Trybuś's research on unrealized urban and architectural projects highlights the structural gap between ambitious modernization plans and their limited implementation [2:5–9]. Against this backdrop, the effectiveness of the FKW becomes particularly significant. Unlike many civilian projects that remained at the level of plans, competitions, or conceptual drawings, the Fund not only designed but translated standardized designs into executed housing estates, barracks, and officers' residences, (Fig. 20) embedding modern spatial order into everyday environments [1,23,25]. This practical effectiveness situates the FKW within the material dimension of state modernization, where ideology was embedded not primarily in representational form but in repeatable spatial solutions and everyday living environments [2,9]. Its activities went beyond purely military functions and constituted a broadly understood modernization impulse - both locally and nationwide.

Comparative perspectives on state-driven modernization further reinforce this interpretation. Studies of Gdynia as a flagship project of interwar modernism demonstrate the discussions on typification, repetition of functional solutions, and the subordination of architectural form to pragmatic and ideological imperatives and how they served the construction of a centralized state structure [4–6,11]. In the volumes published in connection with the conference cycle *Modernizm w Europie – modernizm w Gdyni*, edited by Maria Jolanta Sołtysik and Marek Stępa (2009; 2011; 2022c), modernity is conceptualized not primarily as a stylistic idiom, but as an operational framework for organizing space, labor, and social relations. From this perspective, architecture functions as an instrument of governance rather than representation. Although port infrastructure and military housing differed fundamentally in program and scale, both relied on comparable institutional mechanisms and deployed architecture as a means of structuring spatial order and manifesting state presence.

Studies of military and public architecture from the interwar period emphasize the growing role of standardization and functionalization as instruments of state policy. Analyses of barracks and soldier housing demonstrate that repeatable design solutions, often developed through centrally organized competitions, were not merely technical responses to budgetary constraints but reflected a broader institutional culture shaped by hierarchy, discipline, and administrative control [8]. The recurrence of similar architectural layouts across different regions, frequently adapted to local conditions but based on shared typological schemes, confirms the existence of a coordinated design logic operating beyond individual commissions.

Theoretical reflections on typification and repetition in interwar architecture further support this interpretation. Jadwiga Roguska [7] has examined the role of the “type” as both a technical solution and ideological instrument in detail. Her analysis of interwar Warsaw architecture shows that typification functioned simultaneously as a practical model for repeatable construction and as a means of shaping modern space in accordance with state objectives. Her analysis of Warsaw’s 1920s and 1930s architecture, “type” was not only a spatial organizing tool but a conscious instrument of modernization. FKW investments—based on designs of standardized barracks and residential buildings—closely parallel these tendencies, demonstrating how architectural repetition operated across scales, from individual dwellings to entire garrison estates [7,22].

Some authors [36, 37, 38, 39, 40] point to the deliberate adoption of rationalist and typification principles, referencing source materials published in *Polska Zbrojna* and the *SARP Yearbooks*. Contemporary interpretations present FKW as an institution embedded within a larger project of social reform and structuring, with architecture as its primary tool.—While many civilian architects pursued modernist reform in housing for broad social groups, FKW represented a more hierarchical and institutional variant of modernism, directly subordinated to military structures and administrative order. Typification in this context was not merely a strategy to overcome budgetary constraints but a mechanism for producing disciplined spatial environments aligned with state authority [7,30]. In this context, the FKW construction aligns closely with broader tendencies in state-led construction, where cost efficiency, functional clarity, and visual discipline were combined with normative expectations concerning social order.

At the same time, architectural quality and professional standards at FKW were maintained at a high level. Architecturally, FKW buildings represented a high design standard, engaging leading interwar architects - Marian Lalewicz, Czesław Przybylski, Kazimierz Tołłoczko, Romuald Gutt, Józef Jankowski, Bohdan Lachert, Józef Szanajca,. Housing construction carried out by the Military Accommodation Fund (FKW) enjoyed a very positive reputation, and its projects were regarded as models for contemporary civilian residential developments [47]. Dariusz Błaszczyk’s study of Jerzy Sosnkowski highlights the role of military investors in introducing modern architectural standards in both central and in regional, and peripheral contexts - Warsaw, Stanisławów, Legionowo, and Góra

Kalwaria [41]. The same author notes that interiors designed for FKW housing by Sosnkowski were characterized by careful lighting, restrained color schemes and attention to furniture, and detail, demonstrating that standardized solutions could coexist with architectural refinement and technical quality.

FKW's institutional autonomy and stable financial structure further distinguished it from other public investors. Funded largely through revenue from military property and housing fees, the Fund was relatively insulated from short-term budgetary fluctuations [21,24]. This stability enabled the realization of long-term investments, even during the economic crisis of the 1930s, reinforcing its role as an effective state patron of architecture and urban development [1,23,25]. From the outset, FKW implemented modern technical and urban standards, often ahead of the prevailing norms, including access to sewage systems, central heating, water supply, social infrastructure and green spaces [1,33]. Its investments contributed to the transformation of urban space from fragmented nineteenth-century patterns into coherent ensembles characterized by functional zoning and infrastructural integration.

Ultimately, FKW functioned as a new type of state investor: a technocratic institution grounded in long-term planning, standardized design, and clearly defined strategic objectives. Its activities demonstrate how architecture in the Second Polish Republic operated simultaneously as an instrument of modernization and as a medium through which state authority, discipline, and social order were materialized in space [1,8,9,30].

Taken together, these perspectives allow the results of the present study to be interpreted not as isolated architectural cases, but as manifestations of a broader system in which standardized construction served both practical and ideological functions. The FKW's housing projects demonstrate how interwar state modernism was materialized through repeatable spatial forms, embedding administrative logic, hierarchy, and discipline into the built environment [1,7,8,9,30–32].

5. CONCLUSIONS

Military Accommodation Fund was established in 1927 and immediately took on the task of constructing residential buildings for officers and married non-commissioned officers of the Polish Army. During the interwar period, the Military Command and representatives of the state administration attached great importance to the issue of soldiers' accommodation, treating it not only as an economic matter but also a concern for health and morals. In line with the prevailing ideas of the time, it was believed that healthy, hygienic living conditions shaped a new type of citizen, positively influencing both the physical condition and morale of the soldier.

To develop a new type of accommodation - healthy, hygienic, economical, and aesthetically pleasing - two specialized entities were established: the Construction Department of the Ministry of Military Affairs and the Military Accommodation Fund. These efforts were carried out, among other means, through architectural competitions, especially promoted among young architects in cooperation with the Association of Polish Architects (SARP). These competitions helped establish uniform standards regarding floor area, ventilation, sunlight exposure, and fire safety. An example is the 1928 competition for a standard house for officers and non-commissioned officers - one of the first of its kind in the Second Polish Republic. The innovativeness and high level of the designs commissioned by FKW were also confirmed by the achievements of the architects involved in its projects, such as Józef Szanajca, Bohdan Lachert, Romuald Gutt, and Józef Jankowski. Special emphasis was placed on construction

durability, exemplified by the first use in Poland of reinforced concrete roofs instead of wooden ones, significantly reducing the need for future repairs and maintenance.

Although the architecture commissioned by FKW was functional and modern, it also carried a strong ideological message. Its aesthetics, rooted in the language of modernism and rationalism, harmonized with the ethos of the army and the authoritarian state. Unified forms, modularity, compositional discipline, and clarity of spatial solutions corresponded with the hierarchical structure of the military and the Sanacja vision of a modern citizen - disciplined, healthy, and spatially and organizationally integrated. Therefore, the architecture of FKW was not merely a manifestation of technical and utilitarian modernity, but also a tool for shaping desirable social and political attitudes.

FKW investments were based on an economical design approach while ensuring a high technical standard - all buildings were equipped with modern sanitary installations. Only multi-storey construction was used - two-, three-, four-, and five-storey buildings, often with elevators - which complied with urban planning requirements. The dominant form of flats was small, single-aspect apartments (non-through apartments), which despite their limited size, offered significantly higher standards than traditional rooms in tenement houses. Where possible, more functional flats were designed with better ventilation and innovative solutions such as laboratory kitchens allowing two separate spaces.

The investments were financed by the fund, and the buildings - its property - would become state-owned in the event of FKW's dissolution. The allocation of apartments remained under the authority of the Ministry of Military Affairs. Between 1927 and 1937, FKW constructed 355 residential buildings in 111 localities, amounting to over 3.3 million cubic meters of volume and 7,334 apartments (3,047 for officers and 4,287 for married NCOs). In 1938, construction continued on 76 more buildings in 51 towns, with 1,577 apartments under construction. In smaller garrisons such as Nisko, the Fund also carried out civil investments: workers' housing, office buildings, inns, hotels, and shops, all according to standardized architectural designs.

Thanks to the high prestige of military investments, significant budgetary resources were allocated to FKW projects, which not only advanced military construction but also helped set new standards in civilian architecture. FKW's operations were financed primarily through the accommodation tax on premises, introduced in 1926, which had yielded over 114 million złoty in revenue by the end of 1938. In addition, the Fund could take out loans—up to 140 million złoty—guaranteed by the government, which allowed for the implementation of extensive investment programs.

The comprehensive development of land around the buildings - through the construction of fences, parks, children's sports facilities, and small architectural elements - emphasized the functional and aesthetic character of the entire building complexes. As a result, military construction became synonymous with progress, spatial order, and healthy architecture, breaking away from the historical image of austere military facilities. The Fund's activities were not limited to residential construction but also encompassed barracks, hospitals, strategically important workers' settlements, and buildings for ministries, funded from their own budgets.

In effect, the activities of the Military Accommodation Fund played a key role in shaping a modern approach to state construction in the Second Polish Republic. At the same time, it significantly improved housing conditions for the military personnel and raised hygienic, functional, and aesthetic standards, exerting a long-term influence on the development of architecture in Poland.

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