

Wojciech Rymsza-Mazur

Fortified Barrack Complexes of the Galician Fortresses of Krakow and Przemyśl – a Path towards Adaptation

Wojciech Rymsza-Mazur
Krakow University of Technology
Faculty of Architecture, Institute of Landscape Architecture
PL – 31 555 Krakow, Warszawska 24

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Barrack complexes of Krakow and Przemyśl, the largest Austro-Hungarian fortresses in Central Europe, are numerous and relatively well-preserved facilities of the former garrison backup infrastructure. Their solutions, although different in terms of construction time and contemporary function, nowadays constitute successful examples of adaptation, revitalisation, and heritage conservation. They include the campus of the Cracow University of Technology, the historic complex of exemplary Archduke Rudolf barracks that has been taken over from the army, adapted and extended in the 1960s and 1970s, at present revitalised according to the concept of the Education and Museum Centre that takes into consideration Tadeusz Kościuszko, the military engineer, after whom the university was named. A part of the historic supply complex of the Krakow Fortress adapted to the Home Army Museum, as an example of saving a building on a degraded post-military area abandoned by the army and deprived of its identity, received a new *genius loci* in the museum's architectural vision and space of ideas. The phenomenon of cavalry and aviation barracks, the combination of imperial and royal cavalry with the outset of military aviation, constitutes a unique landscape of airfields from the times of the monarchy. Adjacent to the complex of the new Museum of Polish Aviation and Aviation Culture Park, they are still used by the army. A barrack complex in Siedliska near Przemyśl raised at a background of the outer ring of fortifications with its vision of a hostel, a small tourist refuge lost somewhere in the Polish-Ukrainian frontier, will serve for the purposes of education and cultural tourism as a site with an interesting neighbourhood of historic military architecture that is unique in Europe.

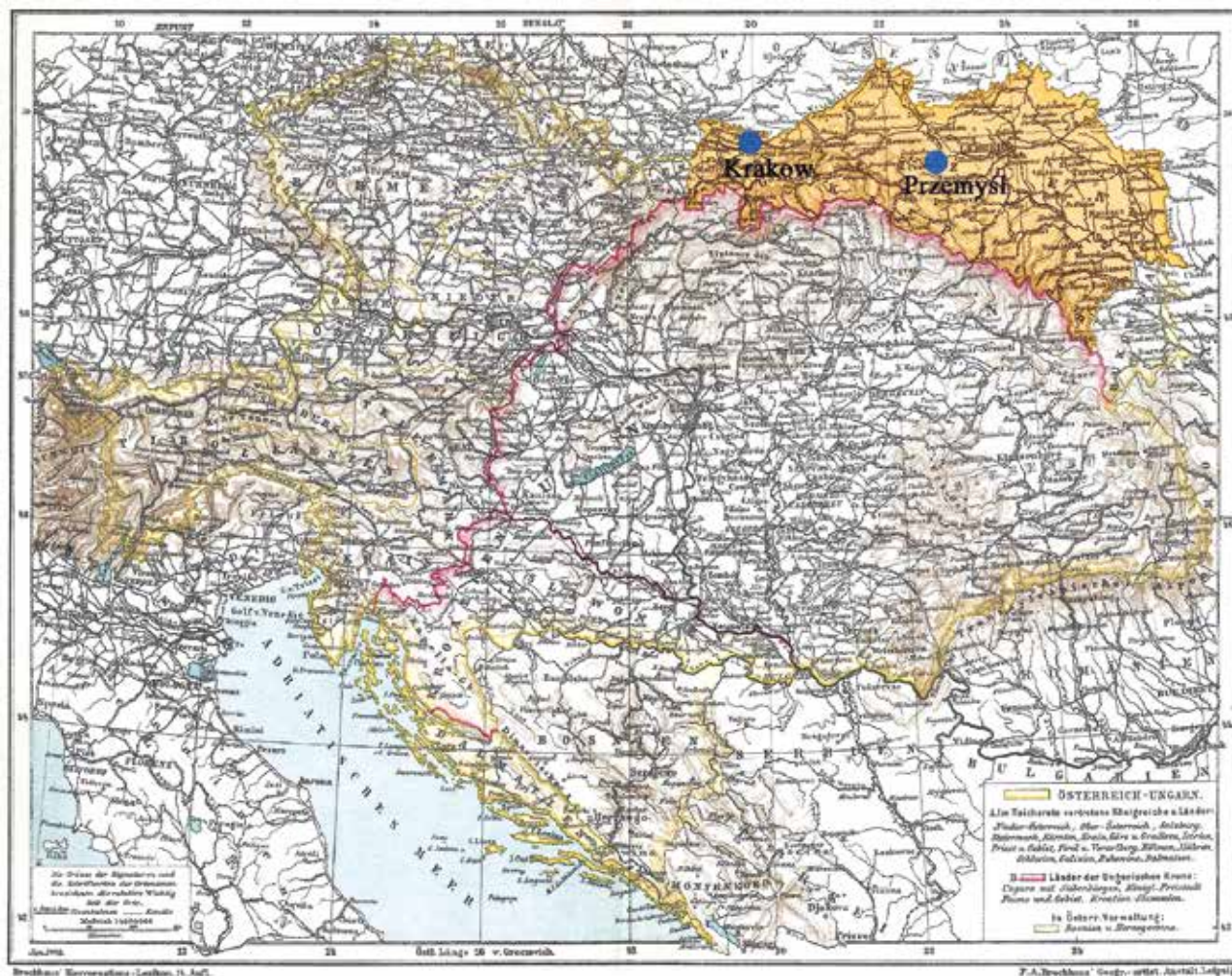
INTRODUCTION

Forms of barrack structures understood as a place for stationing warriors have been known in the history of fortifications since ancient times, dating back to the sixteenth century BC. According to the historic sources, barracks for permanent armies were known in ancient Egypt, Babylonia, Assyria, and Persia. In the times of the Roman Empire, temporary and permanent legionary camps or *castra Romana* as well as permanent posts at the Empire's borders were prominent examples of fortified barrack and defence buildings. In the Middle Ages, royal and princely guards and military crews were permanently garrisoned inside castles, fortresses, and urban fortalices. In the course of armament development, new forms of fortifications emerged such as roundels and later bastions surrounding Renaissance and Baroque residences and urban fortifications¹.

Almost until the turn of the eighteenth century, in times of peace, the European armies did not maintain permanent military units that would require large garrison investments such as barracks or backup infrastructure. Only in the nineteenth century, with the progress of military technology, new military doctrines emerged indicating the necessity of maintaining permanent armies, providing them with barracks, storing multiple devices, and transportation, all being factors of effective warfare, which are nowadays called logistics. Building barrack complexes and backup facilities for the army reached its peak with the militarisation of the states and entire societies, which occurred in the history of the European powers such as Germany, France, Austria, and Russia at the time of nineteenth-century industrial revolution². The partition of the former Polish

1 GUERQUIN, BOHDAN, 1979, 22-27.

2 RYMSZA-MAZUR, WOJCIECH, 2010, 303-309.



1 Austro-Hungarian Empire; Galicia and the towns of Krakow and Przemyśl are marked in colour (Politische Übersichtskarte von Österreich-Ungarn, F.A.Brockhaus' Geogr.-artist. Anstalt, Leipzig, 1904, collection W. Rymcza-Mazur).

Austro-Ugarska Monarhija, bojom označena Galicija te gradovi Krakow i Przemyśl (Politische Übersichtskarte von Österreich-Ungarn, F. A. Brockhaus' Geogr.-artist. Anstalt, Leipzig, 1904., zbirka W. Rymcza-Mazur).

Republic, which took place in 1772, and its subsequent phases defined the division of territories and powers in Central Europe that occurred in the following decades. The regions of Galicia and Lodomeria, commonly known collectively as Galicia and corresponding to the southern and eastern parts of the Republic, were occupied by the Austrian Empire. Their official name referring to the former Principality of Galicia–Volhynia was intended to justify the old claims of the Habsburg to these regions (Fig. 1).

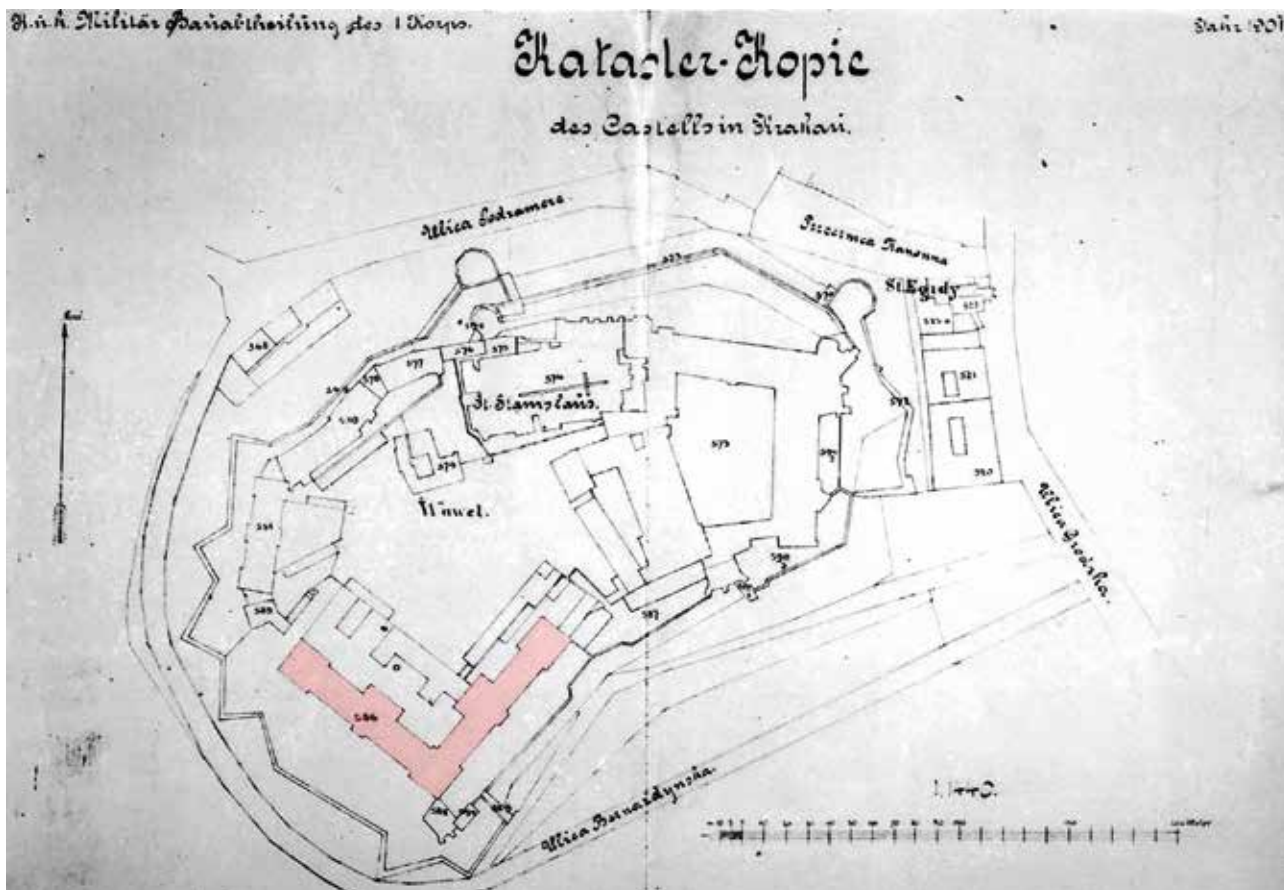
An insurrection suppressed in 1846 brought an end to the Free City of Krakow that was created by the Congress of Vienna at the border of the three partitions. The city reconquered by the Austrian army lost its economic significance as it became a poorer province of Vienna. Due to the growing threat from the Russian Empire, the fortifications were hastily extended. Decisions were made to build strong border fortresses in Krakow and later in Przemyśl, which were strategic cities in terms of the monarchy's security.

Both external and internal geopolitical conditions of the mid-nineteenth century necessitated organisational and structural changes in armed forces of the Habsburg Monarchy already at the beginning of Emperor Franz Joseph I's reign.

It is noteworthy that in mid-nineteenth century, the largest Galician garrisons such as those of Lviv, Krakow, and Przemyśl still did not have their own barrack infrastructure which could provide accommodation and adequate garrison facilities to the growing regiments. At the time, requisitioned monasteries as well as public and private buildings were used as military quarters.

THE KRAKOW FORTRESS

The decision to build a fortress in Krakow was made in 1850. Parallel to the completion of subsequent fortifications, new complexes of barracks were erected in the city. These included the barracks at the Rajska Street, Powiśle



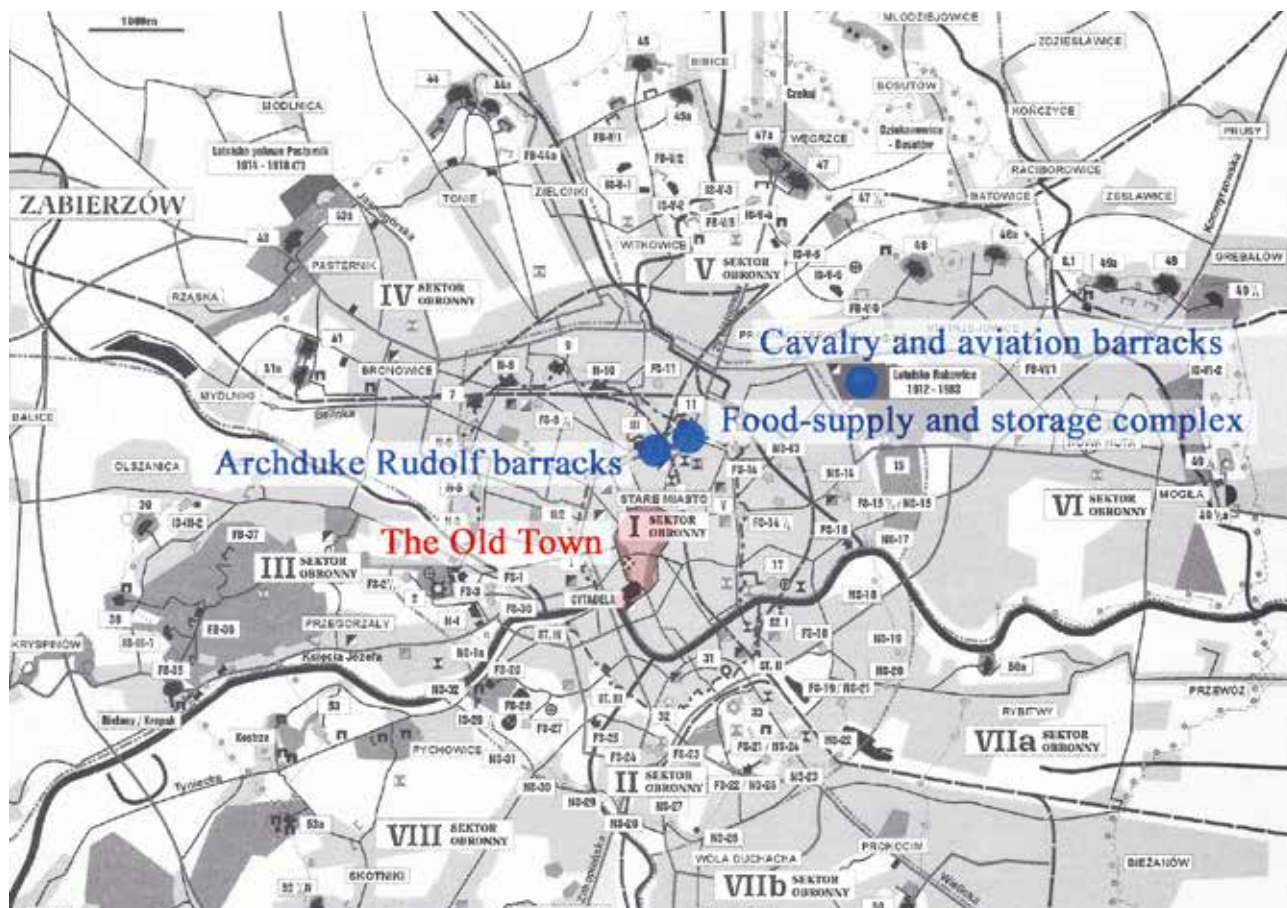
2 Wawel Castle Hill with Royal castle, military hospital marked in colour (Kataster-Kopie des Castells in Krakau, 1901, CAW).

Utvrđeno brdo Wavel s Kraljevskim dvorcem, bojom označena garnizonska bolnica (Kataster-Kopie des Castells in Krakau, 1901, CAW).



3 Krakow – view of the Wawel hill (photo: W. Rymza-Mazur, 2009).

Krakow – pogled na wawelsko brdo (foto: W. Rymza-Mazur, 2009)



4 Schematic plan of the Krakow Fortress, the locations of the Old Town and the structures described in the article are marked with colour (Fig. M. Chłopek, 2002).

Shematski plan Tvrđave Krakov, bojom označeni Stari grad i strukture opisane u članku (autor: M. Chłopek, 2002.)

and in Podgórze³. Wawel, the Polish national pantheon, became a citadel with the royal chambers serving as army quarters. Military units were also garrisoned in nearby monasteries for fear of riots and revolts of the population⁴.

As the fortress was extended in 1860s, a two-winged garrison hospital was erected on the Wawel hill, the first Austrian garrison facility on this scale within the city (Fig. 2). The outer façades of the wings that were hidden behind the greenery of the hospital gardens occupied the space of the demolished sections of the castle walls, which once formed defensive curtains of the Sandomierz tower⁵. The western wing of the building, which was later adapted to serve representative and residential purposes of state administration, is the only one to have survived until today (Fig. 3).

After the fortresses in Krakow and Przemyśl were built, Galicia, then a poorly developed and war-damaged territory, was transformed into an outpost of strategic importance for the security of the monarchy. The rapidly developing

artillery, the lost wars with Prussia in 1859 and with Italy in 1866, and the experience of the Franco-German War of 1870 triggered the next phase of the fortress extension by the artillery forts. Simultaneously, backup facilities were further developed as new barrack complexes were built in connection with railway infrastructure that constituted the principal means of military transportation⁶ (Figs. 4, 5).

Due to the fact that the occupation restrictions were mitigated and Galicia was granted wider autonomy in 1867, the province could possess its own self-government authorities, Polish was restored as official language, and a possibility of cultural and educational development emerged. These political concessions were at the expense of large-scale development of military defence and garrison investments charged to the city budgets. This impeded their economic development, which was by definition subordinated to superior military objectives.

ARCHDUKE RUDOLF BARRACK COMPLEX

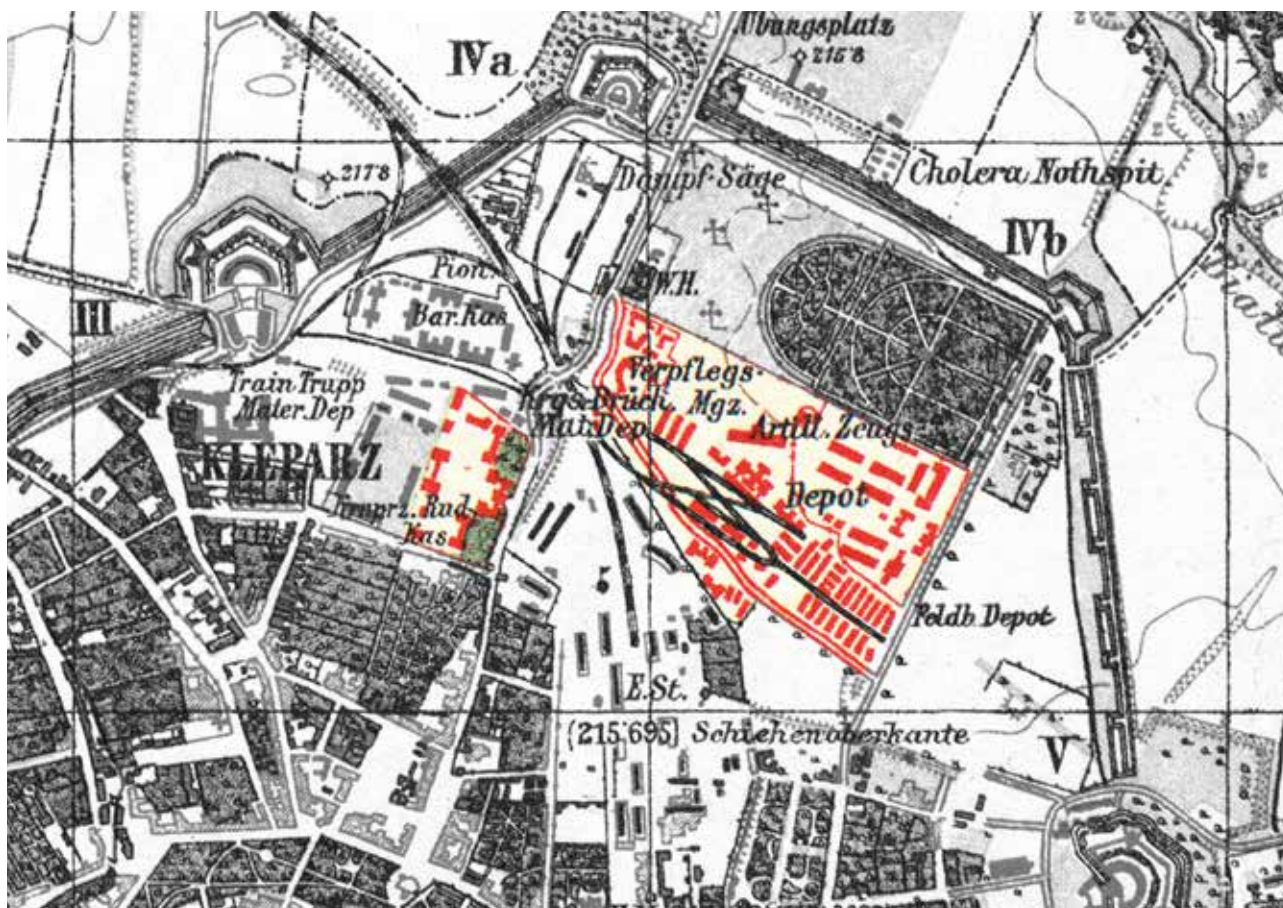
In 1872, the construction of the city's largest complex of barracks, at that time named after Archduke Rudolf,

3 PURCHLA, JACEK, 1992, 104.

4 PURCHLA, JACEK, 2007, 623.

5 BIAŁKIEWICZ ZBIGNIEW, JAN, 2008, 41, 42; RYMSZA-MAZUR, WOJCIECH, 2014, 38.

6 BOGDANOWSKI, JANUSZ, 1979, 156-170.



5 Detail of the Krakow Fortress master plan, barracks and infrastructure buildings from the second half of the nineteenth century and the beginning of the twentieth century (General-Übersichts-Plan von Krakau 1:25,000, 1901, National Archive in Krakow).

Dio Generalnoga plana Tvrđave Krakow, četvrt vojarni s pratećim i pozadinskim objektima iz druge polovine 19. i početka 20. stoljeća (General-Übersichts-Plan von Krakau 1:25,000, 1901., Narodni Arhiv u Krakovu).

started at Warszawska Street (Fig. 6a). This modern investment with barracks built from 1872 to 1877 was situated in the area of the Krakow railway station. The complex's axis was marked by the headquarters edifice that was located along the Warsaw road and flanked by a series of battalion barracks on both sides with officers' gardens planted at the front. The interior of the complex consisted of a large parade ground surrounded by the said buildings. It was also limited by a third identical barrack building located to the west at the complex's axis as well as a firehouse and stable. To the north was a military custody building and to the south the officers' mess built between 1905 and 1907⁷ (Fig. 6b).

A technical and warehouse area, constructed in phases between 1881 and 1910, was located the west of the barrack complex and consisted of a series of facilities such as an artillery shed, warehouses, firehouses, etc.

Until the First World War, the Archduke Rudolf barracks housed the 13th Galician Infantry Regiment, where many Poles served. The formation became deeply rooted in the

history of the city and its inhabitants' memory. The exemplary architecture of the complex's main buildings as well as its spatial layout shaped a new model of barrack projects introduced at the time throughout the entire monarchy. The interiors of barrack buildings were equally unified with façades made of facing bricks with bicolour details, accentuated by decorative patterns of cornices and blind arcades. The layout and form of the façade décor of the headquarters building with a unique arrangement of corner towers hinted at Rundbogenstil⁸ exemplifying the historicist trend of mid-nineteenth century Vienna military architecture as well as some civil buildings erected in Krakow.

The building which is best preserved and most architecturally interesting in its external form is a small structure of a former military custody with a unique military prison architecture, which makes it a valuable monument of the period. The later building of the former officer's mess has also been preserved in its complete shape and external décor.

After the First World War, the barrack complex taken over by the Polish Army was named after King John III

7 HOLEWIŃSKI, MIROŚLAW, 1998, 75; RYMSZA-MAZUR, WOJCIECH, 2014, 39, 40.

8 TOŁŁOCZKO, ZDZIŚLAWA, 2011, 257, 258.

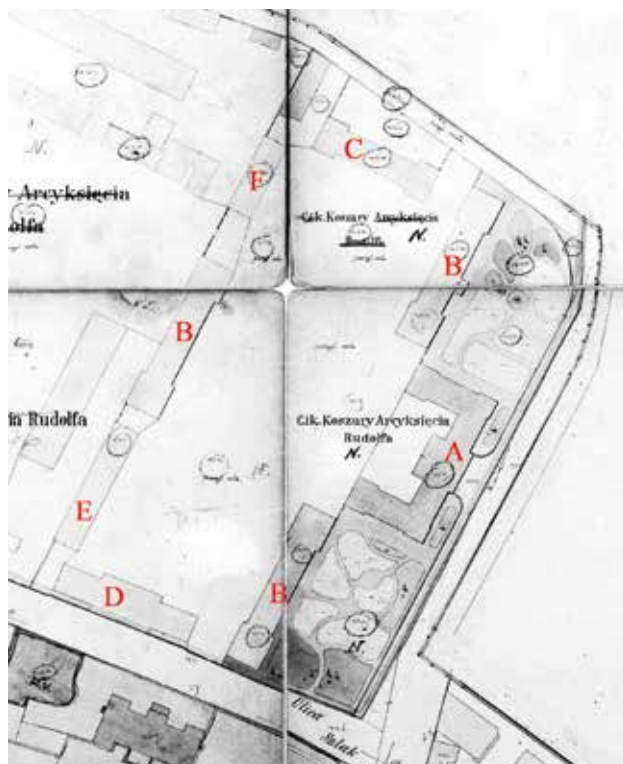


6a. Archduke Rudolf barracks at Warszawska Street in Krakow (photo: I. Krieger, MHK, after 1877).

Vojarna Princa Rudolfa pri Varšavskoj ulici u Krakowu (foto: I. Krieger, MHK, nakon 1877.).

6b. The Archduke Rudolf barracks complex, A. headquarters building, B. battalion buildings, C. detention unit, D. casino, E. carriage house, F. stable, (Cadastral map of Krakow, 1906, the National Archives in Krakow).

Kompleks vojarni Princa Rudolfa, A. zgrada zapovjedništva, B. zgrade za smještaj postrojbi, C. vojni zatvor, D. kasino, E. remiza, F. staja (katastarska karta Krakowa, 1906, Državni arhiv u Krakowu)



Sobieski. The complex's layout was significantly modified by an internal avenue dividing the parade ground along the axis of the main entrance and the entire urban layout. This composition has been preserved to date and it still forms the principal axis of the green interior of the Campus. During the Second World War, units of the German Luftwaffe were garrisoned in the barracks at Warszawska Street. In 1948, most barrack facilities were passed to the Polish Army for the purposes of the new University of Technology established in Krakow. First adaptations for the university were initiated in late 1940s and the modernist remodelling of the complex was carried out in the 1960s and early 1970s (Fig. 7).

The headquarter building became the premises of the Rectorate and the Faculty of Civil Engineering. The three barrack buildings were adapted for the purposes of individual faculties. The changes that involved the removal of corner towers of the main building and the construction of another storey also affected the barrack buildings, with avant-corpses added to their eastern façades in order to accommodate the lecture halls. The late modernist remodelling strengthened the monumental character of barrack architecture creating an interesting compilation of modernist forms and nineteenth-century military architecture. The historical image of the third barrack building that accommodates the Faculty of Architecture has been preserved, and the fourth storey built above it copied the original barrack form. The body and architectural decoration of the

officers' mess, which was adapted to a library, remained unchanged and so did the architecture of the former military detention unit that was given over by the army as late as 1985⁹.

The barracks' parade ground was transformed into a courtyard or square with visible communication axes and completed with plant arrangements. The square houses pavilion-type buildings constructed in different periods, namely a reading-room and a cafe as well as a more recent cafeteria complex, which partly covered the old custody and provided a new modernist frontage of the interior. At the beginning of the twenty-first century, the former stables, later transformed into a boiler-plant, were adapted for exhibition and auditorium purposes. It was the first completed heritage adaptation of a historic military backup development.

In the last decade, the Cracow University of Technology initiated revitalisation of the entire complex. It included the restoration of nineteenth-century brick façades of the Rectorate building, the Faculty of Civil Engineering and barracks, as well as renovation of preserved details and colour range of ceramic materials. The woodwork and ironwork of the more recent glass façades were changed to restore the previous layout (Fig. 8). Gradually, functional and technical modifications have been introduced in order to adjust the buildings to the modern standards and construction regulations, with simultaneous preservation

⁹ HOLEWIŃSKI, MIROŚLAW, 1998, 75.



7 Campus of the Cracow University of Technology, view from Warszawska Street, with former headquarter building adapted to Rectorate and the Faculty of Civil Engineering, as well as one of the battalion buildings adapted to the Faculty of Electrical and Computer Engineering (photo: W. Rymysza-Mazur, 2010).

Kompleks zgrada Tehničkoga sveučilišta u Krakowu, pogled iz Varšavske ulice, s bivšom zgradom zapovjedništva preuređenom u zgradu Rektorata i Građevinskog fakulteta te jednom od zgrada za smještaj postrojbi preuređenom u zgradu Fakulteta elektrotehnike i računarstva (foto: W. Rymysza-Mazur, 2010.).

of historic forms and details. The former military custody will house the Museum of the University of Technology as a part of a project to create a centre for education, museum, and cultural tourism that will respect the layout of the historic interior.

Revitalisation projects of the barrack area have been developed with regard to heritage conservation, functional, spatial, and communication aspects as well as the greenery of the courtyard and former officers' gardens that were restored at the border of the public space¹⁰ (Fig. 9). It should be emphasised that the site of the barrack complex of the present University of Technology has been recorded in the register of historic monuments. Positive interaction between the architecture of the university façades along Warszawska Street and the modern development of the adjacent blocks with brick façade décor is noteworthy.

In the western part including the former military backup facilities, which also belongs to the University of Technology, a building of the Chemistry Faculty was erected in 1970s. Already in the present century, the building of the former artillery shed was adapted to an auditorium complex, new university investments were completed and the communication system within the complex was remodelled. Prospectively, the whole campus will be revitalised to incorporate the historic university buildings into the urban tissue.

FOOD-SUPPLY AND STORAGE COMPLEX

In the 1880s, the extension of the fortress backup facilities also covered the area to the north-east from the track system of the Krakow railway station, where a large food-supply and storage complex of the Krakow Fortress as well as artillery workshop and warehouse facilities were raised. This technical and industrial area was located between the Warsaw road, railway tracks, Rakowicka Street, and the Rakowicki Cemetery, nowadays one of the largest Krakow cemeteries, which was established at the turn of the nineteenth century. The area included a number of buildings with various functions, which were constructed in the 1880s and subsequently altered until the First World War¹¹. The main building housed: the fortress bakery built at the site of the former bastion IV, former barracks later transformed into a canned food factory, cold storage, and laundry. The barrack and storage facility built after the outbreak of the First World War were adapted to the Home Army Museum in the present century. The originally simple and modest architecture of the building with brick façades and compact body around inner courtyard conveyed the austere look of the military barrack architecture of the period (Fig. 10). The large underground storey connected to the adjacent buildings emphasizes its industrial and military character present in the modules of the structure's concrete framework. It should be noted that the provisioning complex of the Krakow Fortress was a peculiar food-supply factory, whose size and multi-functionality were sufficient even after the fortress was extended by another ring of forts on remote outskirts of the town. During the First World War, the complex provided supplies not only to fortress crews but also to front-line troops. After the fall of the Habsburg Monarchy, the provisioning and warehouse complex of the Krakow Fortress was used by the military until the 1990s, and was subsequently passed to the State Treasury and private owners. Since then, it has gradually deteriorated, and the present condition of individual structures varies greatly.

The barrack and warehouse building belonging to this complex has been adapted to accommodate the Home Army Museum. It required comprehensive conservation and functional remodelling acceptable from heritage conservation point of view. This allowed for the creation of a museum institution compliant with the technical standards and the representative function envisaged in its program that would house collections and archives of the largest underground military formation of the Second World War.

In 2006, an open architectural contest was launched for a concept of the building's adaptation for the purposes of the Home Army Museum. The project, finished in 2011,

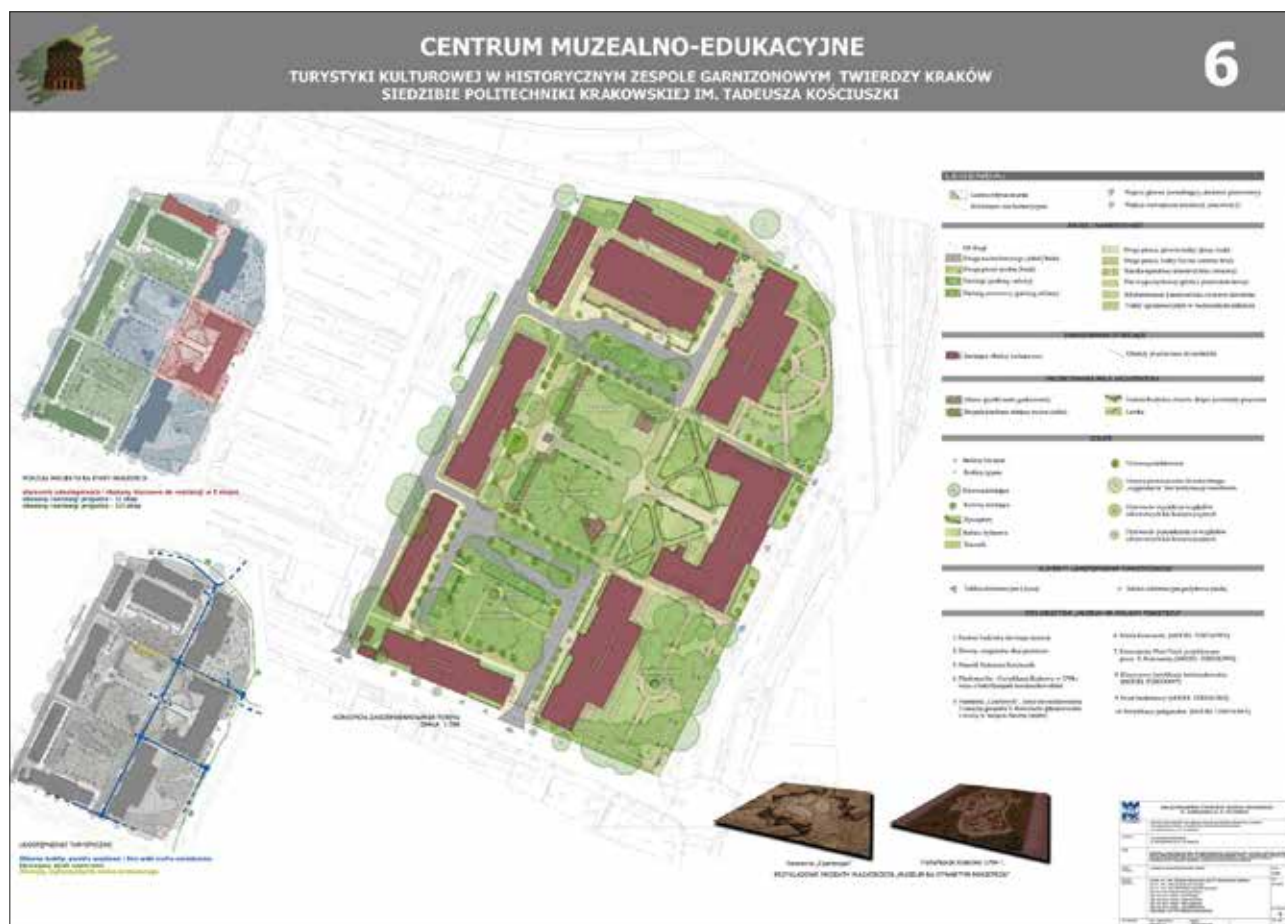
10 MYCZKOWSKI, ZBIGNIEW [et al.], 2010.

11 PURCHLA, JACEK, 2007, 624.



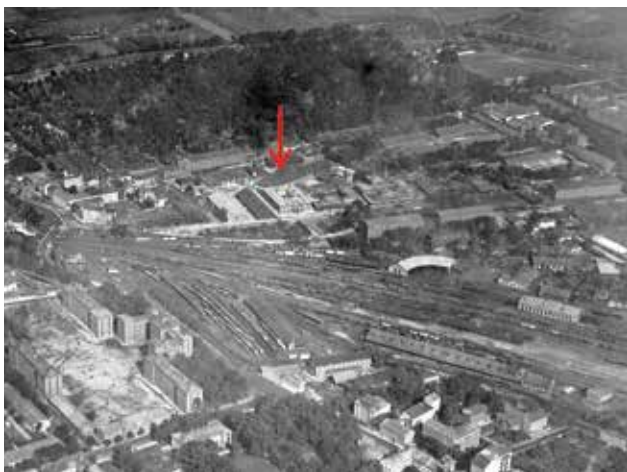
8 Campus of the Cracow University of Technology, with renovated façades of the former command and battalion buildings and new urban-architectural project (left) (photo: W. Rymysza-Mazur, 2013 and 2017).

Kompleks zgrada Tehničkoga sveučilišta u Krakowu, vidljiva obnovljena pročelja nekadašnjih zgrada zapovjedništva i bataljona te u neposrednoj blizini (lijevo) novo urbano-arhitektonsko ostvarenje (foto: W. Rymysza-Mazur, 2013. i 2017.).



9 Revitalisation concept of the historic barrack complex – Campus of the Cracow University of Technology (Z. Myczkowski, [et al.], *Koncepcja architektoniczno-krajobrazowa oraz funkcjonalno-użytkowa adaptacji kampusu Politechniki Krakowskiej przy ul. Warszawskiej w Krakowie wraz z budynkiem d. aresztu, jako centrum muzealno-edukacyjnego turystyki kulturowej w historycznym zespole garnizonowym Twierdzy Kraków – siedzibie Politechniki Krakowskiej im. Tadeusza Kościuszki*, Cracow University of Technology, Faculty of Architecture, Institute for Landscape Architecture, Department of Open Landscape and Engineering, Krakow 2010).

Koncepcija revitalizacije povijesnoga sklopa vojarnje – Kompleks Tehničkoga sveučilišta u Krakowu (Z. Myczkowski, [et al.], *Arhitektonsko-krajobrazna te funkcionalno-uporabna koncepcija adaptacije kompleksa zgrada Tehničkoga sveučilišta, zajedno sa zgradom bivšega vojnog zatvora u Varšavskoj ulici u Krakowu – izvorno garnizonski sklop tvrđave Krakow, u muzejsko-edukacijski centar kulturnog turizma u sjedištu Tehničkog sveučilišta „Tadeusz Kościuszki“*, Tehničko sveučilište, Arhitektonski fakultet, Institut arhitekture krajobraza, Zavod za krajobraz i inženjerske građevine, Krakow 2010.).



10 Aerial photograph of the supply complex with barrack building in the centre (MLP, 1919).
Zračna snimka aprovizacijskoga kompleksa u središnjem dijelu zgrada vojarnje (MLP, 1919).



11 Barrack building of the former supply complex of the Krakow Fortress, adaptation for the Home Army Museum (photo: W. Rymśza-Mazur, 2011).
Zgrada vojarnje nekadašnjega aprovizacijskog kompleksa tvrđave Krakow, adaptacija na Muzej Zemaljske armije (foto: W. Rymśza-Mazur, 2011.).

was carried out as a joint investment of the Home Army Museum, the Małopolska Region, and the City of Krakow. The completed project is a functional and spatial adaptation of the building that considers modern exhibition technologies and the educational programme, at the same time ensuring the multi-functionality of the complex. It allows to store, renovate, and exhibit the collection that presents the idea and activities of the Polish Underground State during the Second World War¹². The architectural vision of the facility combines the preserved external body and its façade with modern technology allowing to expand the exhibits to the space of the inner courtyard covered with a glass roof and to incorporate the underground parts of the museum in its symbolism (fig. 11, 12).

It is noteworthy that the adapted building belonging to the former supply complex now presents itself in an entirely new relationship with the urban environment. It is adjacent to the Discalced Carmelites monastery and the communication infrastructure related to the remodelled road system of the Wita Stwosza Street that serves the new bus station complex between the railway station infrastructure and the historic urban tissue of the Lubomirskiego

12 The Polish Underground State – the name of the secret military and civilian organizational structure in Poland, as well as territorial structures with their own armed forces operating during World War II on Polish territory occupied by Germany (Nazi Germany) and the USSR (Soviet Union). In terms of organization, the structure of the Polish Underground State was unique in war-stricken Europe, given its legal and acknowledged government in exile operating in London, as well as a secret delegation in Poland with intelligence, diversion, education, judicial and political divisions under its control. The armed forces of the underground state included the organized structures of resistance based in the country – with more than 300,000 sworn soldiers being part of the Union of Armed Struggle (ZWZ), the Home Army (AK), as well as regular units of the Polish Army operating under the anti-Nazi coalition of Western European countries.

Street¹³. Crucial in this respect will be the future organization of pedestrian communication between the museum and these complexes, as well as the architecture of their future development due to the important landscape context. The military character of space determined by the still functioning military complexes and facilities along Rakowicka Street should be preserved. Their garrison architecture placed in urban landscape constitutes a perfectly preserved military ambience from the final period of the Krakow Fortress construction.

CAVALRY AND AVIATION BARRACK COMPLEX

Another significant example from contemporary perspective related to the adaptation of historic barrack complexes is the well-preserved complex of cavalry barracks dating from the years 1888-1892 situated on the outskirts of the third ring of artillery forts. Further development of the complex combined its cavalry function with aviation technology that emerged at the end of the nineteenth century. The first balloon flights field built in 1894 preceded the establishment of aviation units in 1912, site of the future Rakowice-Czyżyny airport. In 1915 began the construction of aviation barracks, hangars, and backup facilities. Their history after 1918 to the present day has been closely connected with the history of the Polish aviation¹⁴ (Fig. 13).

Thanks to the significant and already historic cultural value of this complex, the remaining barracks of the first aerodrome and historic hangar, which were not destroyed after the beginning of the war in 1939 and still belong to

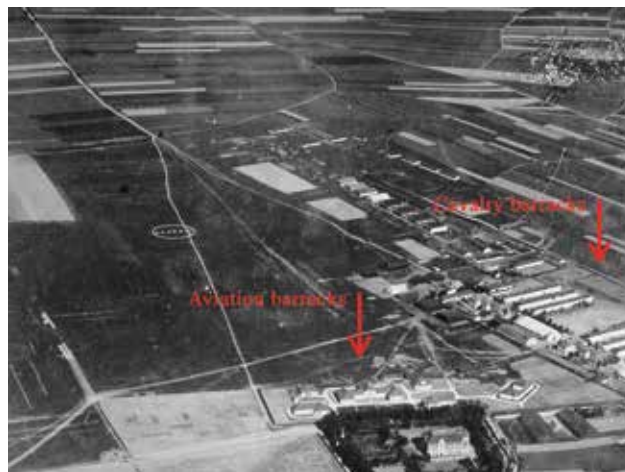
13 JURKOWSKI, RYSZARD, 2006; JURKOWSKI, RYSZARD, 2008.

14 WIELGUS, KRZYSZTOF, 2002, 4-14.



12 Home Army Museum building with inner glass-roofed courtyard (photo: W. Rymcza-Mazur, 2011).

Zgrada Muzeja Zemaljske armije, unutrašnje dvorište natkriveno ostakljenom krovnom konstrukcijom (foto: W. Rymcza-Mazur, 2011.).



13 Aerial photograph of the Rakowice-Czyżyny airport and aviation and cavalry barracks (MLP, early 1920s).

Zračna snimka zračne luke Rakowice-Czyżyny, vojarnje avijacije i konjice (MLP, početak 20-ih godina 20. stoljeća)



14 Area of cavalry and aviation barracks complex, with borders of the Aviation Culture Park in Rakowice-Czyżyny (photo: W. Gorgolewski, MLP).

Područje kompleksa vojarni konjice i avijacije, označena granica Kulturnog parka zrakoplovstva u gradskoj četvrti Rakowice-Czyżyny (foto: W. Gorgolewski, MLP).

the army, have been recently entered in the register of monuments, which guarantees their full protection. The immediate vicinity of the newly created Aviation Culture Park and the present function of the Aviation Museum established on the site of the pre-war airport provide the basis for the preservation of the entire enclave as well as for the protection of remnants of military landscape against pressures of further residential investment¹⁵ (Fig.14).

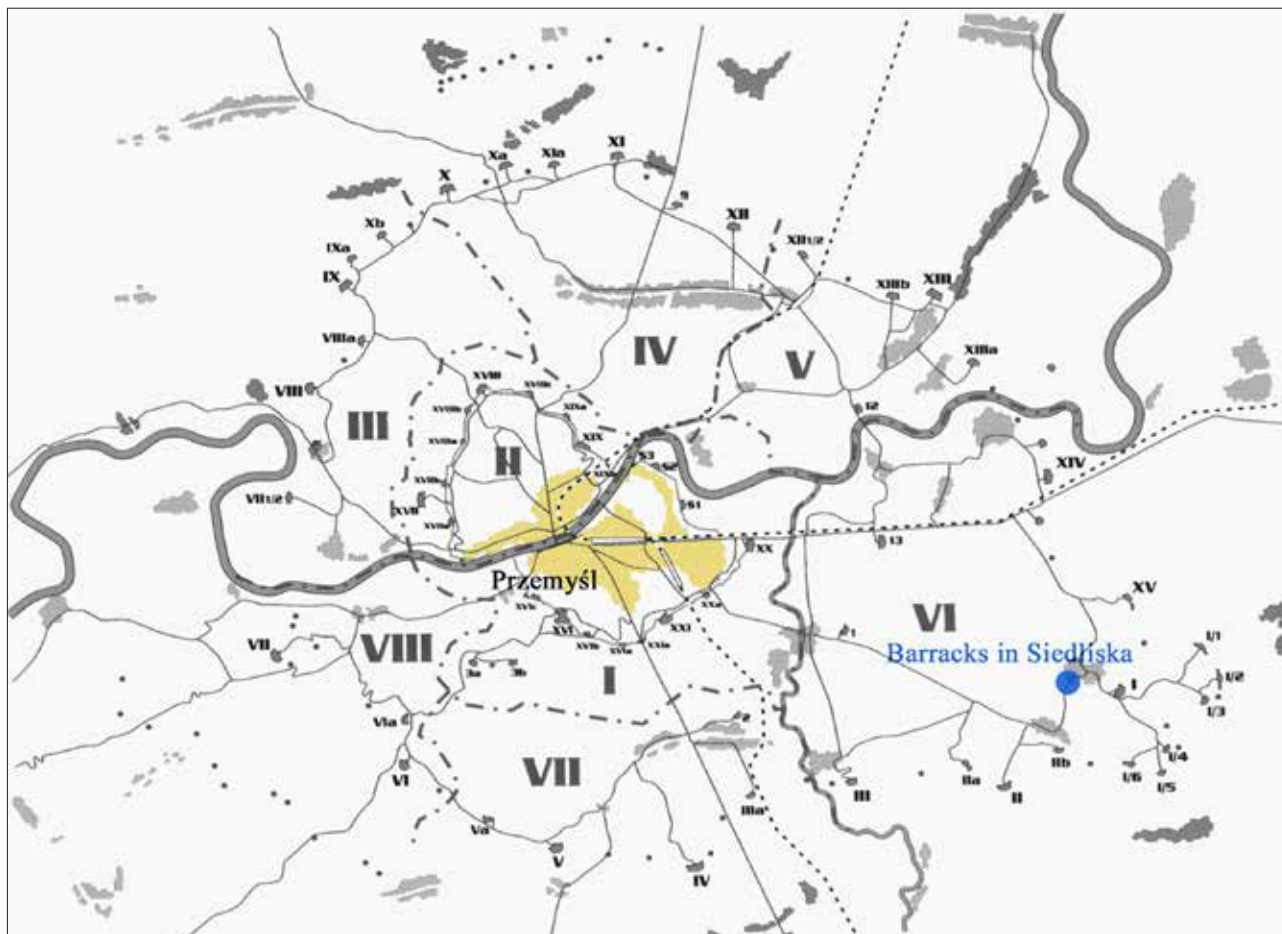
15 Ibidem, 41-46.

THE PRZEMYŚL FORTRESS

Similarly to Krakow, the key factor of military development of Przemyśl was the decision to build a fortress. It resulted in the expansion of military infrastructure, which covered the area adjacent to the railway and surrounding the town, where forts and backup facilities were raised¹⁶. The construction of the Przemyśl Fortress was initiated in the second half of the nineteenth century as a result of postponing the previous construction decisions and plans in order not to exacerbate relationships with Russia. The fortress facilities, starting with artillery forts and subsequently armoured forts, were built using the then modern solutions in terms of materials such as cast concrete and steel roof girders on a large scale. The core of the fortress became fortified encompassing the town and some of the largest Galician barrack complexes and backup facilities serving the fortress and garrison, which were located along the San river in conjunction with the strategic Lviv railway near the existing urban development. The forts of the fortress's ring system that projected far into the foregrounds were connected with a road system of the fortress and supplemented by a system of smaller complexes of barracks and backup infrastructure (Fig. 15, 16). Most of the durable, brick facilities of the military backup infrastructure have been preserved until today and some of them still serve military purposes related to garrison's needs, the frontier character of the town, and the vicinity of the EU and Schengen zone's borders.

The above mentioned smaller barrack complexes deprived of military functions constitute an interesting area of adaptation problems with regard to backup facilities on the town foregrounds.

16 IDZIKOWSKI, TOMASZ; WIELGUS, KRZYSZTOF, 2011, 66-72.



15 Schematic plan of the Przemyśl Fortress, the locations of the structure described in the article and the town are marked with colour (Fig. T. Idzikowski).

Shematski plan twrdave Przemyśl, bojom označen grad i smještaj strukture opisane u članku (autor: T. Idzikowski)

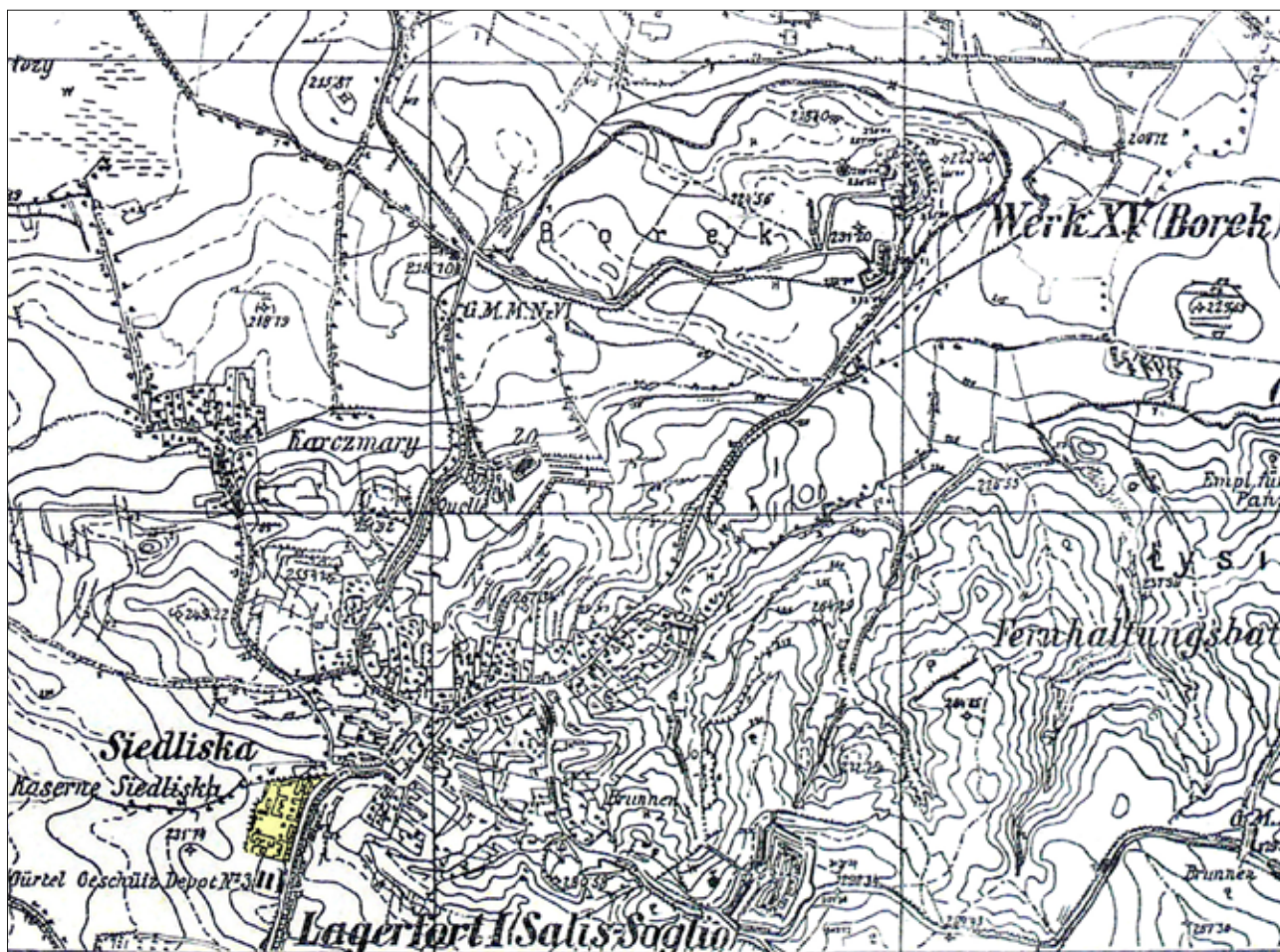
BARRACK COMPLEX IN SIEDLIKA

A good example is provided by a former complex of Austrian barracks in Siedliska, commune of Medyka from 1880-1900. It has been adapted under the operational programme of the Podkarpackie Voivodeship for 2007-2013 and the action entitled “Southern Lateral Route” - Route of Fortress Cultural Tourism in the Przemyśl Fortress, which made it possible to utilise the preserved structures, architectural forms, urban layout, and landscape value to serve functions and projects useful for the local needs. The entire complex of former barracks in Siedliska displays a clear spatial layout of historic facilities with a visible concept of military engineering and the related greenery, with elements reminiscent of the original arrangement. The complex was located in the site defined by its military function in the outer ring of forts of the Przemyśl Fortress. It contained barracks, an officers’ house, stable, and officers’ mess. Its architecture was based on the repetitive pattern of one-storey C-shaped barrack buildings consisting of the main body and two side wings. The former barracks of the southern part of the complex house a primary

school, which was extended by a new two-storey school wing in 1998-2005. The arrangement includes a preserved complex of two identical one-storey barrack buildings with its original quadrangle layout with an inner courtyard and a single building with an identical plan, adjacent to the school. These facilities serve residential purposes. Preparatory work for adaptation included a concept drawn up by the author of this article, which provided the basis for the realisation of the project¹⁷.

The proposed solutions took into consideration both the plans of the investor and the local authorities, hinting at the historic form. As a part of adaptation, a small tourist hostel has been envisaged in the former barrack wing of the school building and an exhibition room has been planned in one wing of the quadrangle barrack complex. The concept ensures vehicle and pedestrian access to the buildings as well as car parks. It also envisages more greenery as a reference to the historic arrangement (Fig. 17).

¹⁷ RYMSZA-MAZUR, WOJCIECH, 2010.



16 Detail of the special plan of the Przemysł Fortress in close vicinity of outer-ring fortress walls, with Siedliska barrack complex marked in colour (Spezial-Übersichts-Plan von Przemysl 1:10 000, Blatt 18, 1896, MNZP).

Dio posebnoga plana tvrđave Przemysł, u bliskom susjedstvu forova vanjskoga prstena tvrđave, bojom označen kompleks vojarne u mjestu Siedliska (Spezial-Übersichts-Plan von Przemysl 1 : 10.000, Blatt 18, 1896, MNZP).

One may hope that the steps taken with the aim of including the adapted complex of Siedliska in the cultural tourist route of fortifications will enable the preservation of its unique historic character of a barrack frontier post, given the fact that the facilities represent a historic monument and heritage of a bygone era (Fig. 18).

CONCLUSION

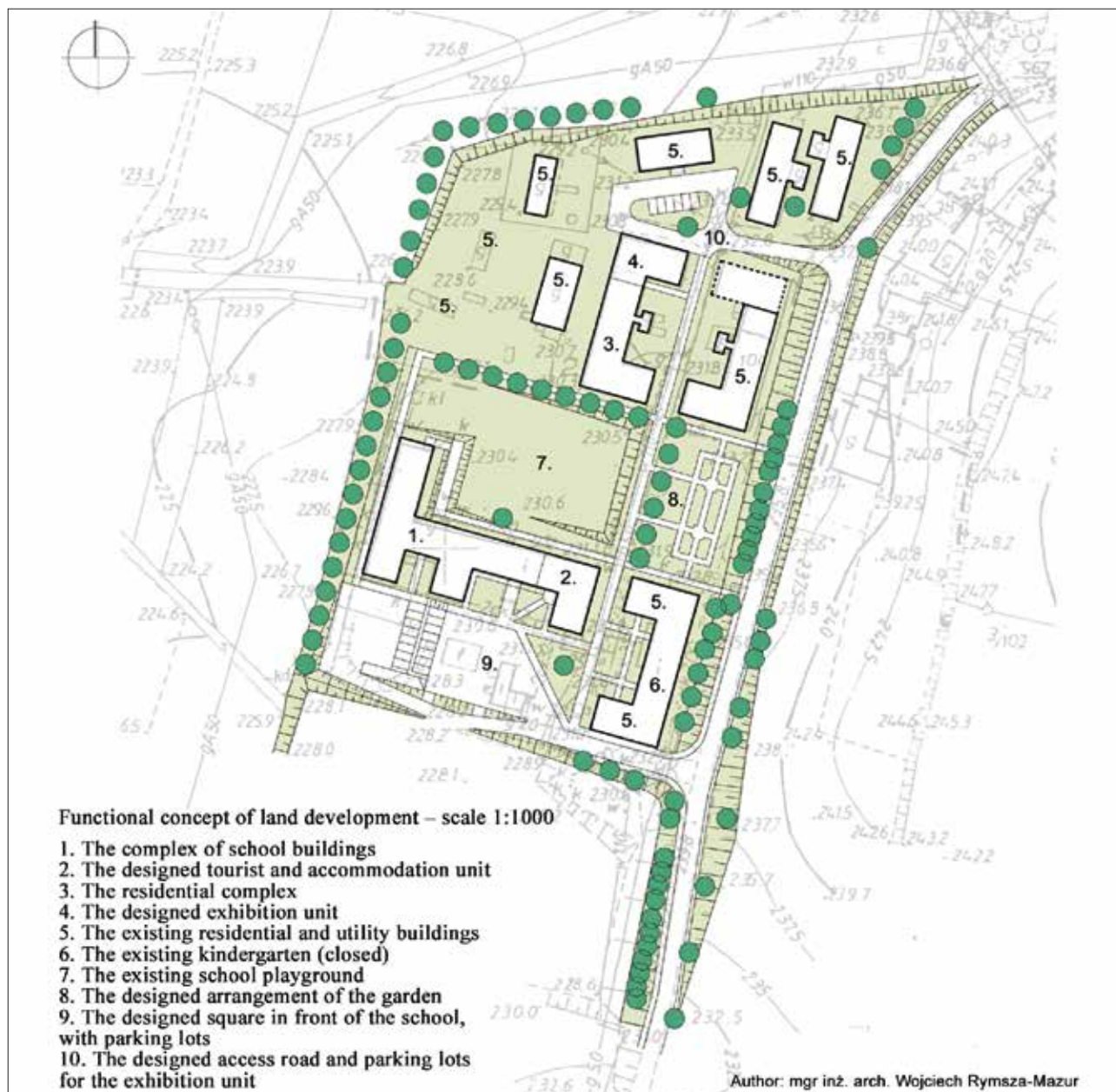
Four characteristic examples of adaptations of nineteenth-century military barrack complexes of the Krakow and Przemysł Fortresses that differ from the point of view of the construction time and function have been presented.

- The former Archduke Rudolf barrack complex adapted to the campus of the Cracow University of Technology with preserved spatial layout, architecture of the buildings, and remnants of greenery.
- Barrack and storage facility belonging to the supply complex of the Austro-Hungarian Krakow Fortress as

the Home Army Museum that has been raised from the historic ruins.

- An active military complex of the former cavalry and aviation barracks preserved in the concept of the Aviation Culture Park.
- Barrack complex in Siedliska, a military post lost in the landscape of the Polish-Ukrainian frontier; in the adaptation concept envisaged as a site serving the cultural tourism purposes of the Przemysł Fortress.

These are prominent examples of adapted, non-fortress military structures. Adaptation of the Archduke Rudolf barracks, carried out in 1960s, confirms the rationale behind the administrative decision to adapt the barrack complex for the purposes of the Cracow University of Technology. Nowadays, it undergoes revitalisation with regard to the Campus spatial development and restoration of the barrack buildings along with the concept of locating the University Museum in the historic military custody. The long awaited



17 Spatial development concept of the historic barrack complex in Siedliska (author W. Rymcza-Mazur, 2010).

Projekt uređenja područja bivše vojarne u mjestu Siedliska (proj. W. Rymcza-Mazur, 2010.).

Home Army Museum realised in the former supply complex of the Krakow Fortress displays an excellent attempt to save a single object from a catastrophe of a spatially degraded area that was abandoned by the army at the end of the twentieth century. The phenomenon of cavalry and aviation barracks, combining imperial and royal cavalry with the outset of military aviation based on both balloons and airplanes, represents a unique landscape of the monarchy's airfields. Nowadays, they are still used by the military, neighbouring the complex of the Polish Aviation Museum as well as the Aviation Culture Park. The fourth example is the barrack complex in Siedliska near Przemyśl, located

at the close background of the fortress's outer fortification ring, previously extended for school purposes. The planned adaptation of a part of the complex to a tourist hostel will revive the region with unique historic and landscape values related to the Przemyśl Fortress.

Hence, the path to adaptation is evidenced with the completed investments and projects that prove the rationale behind the idea to utilise them and that aim at preserving, restoring, and creating a new spirit of place. These projects, along with the effect of spatial, architectural, and natural revitalization, should serve educational, recreational and cultural purposes. They should promote tourism in



18 The Przemyśl Fortress – view of the adapted barrack complex in Siedliska (photo: W. Rymsza-Mazur, 2010).

Tvrđava Przemyśl – pogled na adaptiran kompleks vojarnje u mjestu Siedliska (foto: W. Rymsza-Mazur, 2010.).

the sites of the fortress and garrison landscape as well as historic monuments of military architecture whose values are unique in Europe.

LIST OF INSTITUTIONS AND ABBREVIATIONS:

- CAW – Central Military Archive in Rembertów
- MHK – Historical Museum of the City of Krakow
- MLP – Polish Aviation Museum in Krakow
- MNZP – National Museum of the Przemyśl Region
- National Archive in Krakow

Wojciech Rymsza-Mazur (born 1978), architect, graduate of the Cracow University of Technology, Faculty of Architecture, received a scholarship to conduct his studies at the Bauhaus Universität in Weimar, Germany. Author and co-author of projects and papers on architecture, military architecture, and heritage conservation. Academic assistant at the Department of Open Landscape and Engineering of the Institute for Landscape Architecture, Faculty of Architecture, Cracow University of Technology.

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Sažetak

KOMPLEKSI VOJARNI GALICIJSKIH TVRĐAVA KRAKOW I PRZEMYŚL – PUT K ADAPTACIJI

Vojarne, kao mjesta stacioniranja oružanih snaga, poznate su od davnina. Logori rimskih legija i trajne postaje na granicama Imperija također su bili primjerom postojanja i smještaja stalne vojske. Do kraja 17. i početka 18. stoljeća u Europi nije bilo stalnih oružanih formacija; tek nove vojne doktrine u 19. stoljeću ukazuju na nužnost formiranja stalne vojske i osiguranja smještaja ljudstva, skladištenja sredstava te transporta kao elemenata uspješnog vođenja ratnih operacija, suvremeno nazvanih *logistikom*. Gradnja kompleksa vojarni i pozadinskih sadržaja za vojsku dostigli su svoj vrhunac u 19. stoljeću, za vrijeme industrijske revolucije i militarizacije europskih nacija. Podjela zemalja nekadašnje Poljske u drugoj polovini 18. stoljeća ponovno je odredila podjelu teritorija i raspored snaga u Srednjoj Europi, a anektirane su zemlje, Galicija i Lodomerija, pripale Austrijskoj Monarhiji.

U godini 1846. gušenjem ustanka ukinut je status Krakowa kao slobodnoga grada osnovanog nakon Bečkog kongresa na razmeđu triju anektiranih teritorija. Krakow ponovno osvaja austrijska vojska, grad stagnira i postaje siromašna provincija Beča. Ugroza od strane Rusije pospešuje izgradnju fortifikacija. Donesene su odluke o gradnji moćnih pograničnih tvrđava u Krakowu, a kasnije i u Przemyślu. Karakteristično je da najveći garnizoni u Galiciji, u gradovima Lavovu, Krakowu ili Przemyślu, do početka druge polovine 19. stoljeća nisu još imali vlastitu infrastrukturu vojarni te su u tu svrhu zauzimate samostanske, javne i privatne zgrade.

Odluka o gradnji tvrđave u Krakowu donesena je 1850. godine, a zajedno s gradnjom fortifikacija u gradu nastaju novi kompleksi vojarni: u Rajskoj ulici, u četvrtima Powiśle i Podgórze, a Wawel – poljski panteon određen je za citadelu; pritom su kraljevske odaje korištene za smještaj vojske. Zbog bojazni od nereda i pobune stanovnika, vojne su postrojbe smještene u susjednim samostanima. Zajedno s razvojem tvrđave u 60-im godinama 19. stoljeća na vavelskom je brdu podignuta dvokrilna zgrada garnizonske bolnice, prva austrijska investicija u garnizonske pozadinske sadržaje na području grada. Vanjska pročelja krila zgrade popunila su mjesta razrušenih dijelova zidina kraljevskoga dvorca koje su nekad činile njegove obrambene kurtine s ugaonom Sandomjerskom kulom. Do danas je sačuvano samo zapadno krilo zgrade, kasnije adaptirane u reprezentacijsko-rezidencijalne potrebe državne administracije.

Galicija, tada ekonomski slab i ratnim operacijama uništen teritorij, nakon gradnje tvrđava u Krakowu i Przemyślu postaje predziđem strateškoga značenja za sigurnost Monarhije. Brzi razvoj topništva, izgubljeni ratovi s Prusima u godini 1859. i s Italijom 1866. te iskustva francusko-njemačkog rata iz godine 1870. rezultirali su gradnjom topničkih forova – slijedećom fazom razvoja tvrđave. Istodobno se razvija baza pozadinskih sadržaja i to gradnjom novih kompleksa vojarni realiziranih zajedno s infrastrukturom željeznica kao osnovnog sredstva vojnoga transporta.

U razdoblju od 1872. do 1877. podignut je kompleks vojarni „Princ Rudolf“, tada najveći u gradu, smješten u neposrednoj blizini

krakovske željezničke postaje. Os kompleksa određivala je zgrada zapovjedništva smještena na pravcu varšavskoga trakta, flankirana s objiju strana jednakim zgradama za smještaj postrojbi, ispred kojih su hortikulturno uređene zelene površine. Unutrašnji prostor za vojne vježbe zatvarala je treća istovjetna građevina za smještaj vojske, smještena na osi kompleksa od zapadne strane, s remizom i stajama. Sa sjeverne strane zgrada je vojnoga zatvora, a s južne vojni kasino sagrađen tek u razdoblju 1905. – 1907. godine.

Arhitektura kompleksa kao i urbanističko rješenje predstavljali su uzorak tadašnje gradnje vojarni u čitavoj Monarhiji. U arhitektonskom smislu također su bila originalna pročelja zgrada vojarni od fasadne opeke, u detalju dvobojne, akcentirane ukrasnim sistemom vijenaca te drugim arhitektonskim detaljima. Zgrada zapovjedništva s originalnim ugaonim kulama, rasporedom i oblicima detalja na pročelju slijede *Rundbogenstil*, kao primjer stilskih tendencija historizma druge polovine 19. stoljeća u bečkoj vojnoj, a i civilnoj arhitekturi realiziranoj u Krakowu.

Najbolje sačuvana, a u svojem vanjskom obliku arhitektonski i najzanimljivija, omanja je zgrada nekadašnjega austrijskog zatvora, unikatni primjer vojno-zatvorske arhitekture, i stoga je dragocjen spomenik epohe. U punom obliku i vanjskom uređenju također je sačuvana kasnije sagrađena zgrada nekadašnjega vojnoga kasina. Nakon Drugoga svjetskoga rata, godine 1948., poljske su vojne vlasti većinu objekata kompleksa vojarni predale na uporabu Politehnici – Tehničkom sveučilištu osnovanom u Krakowu. U 60-im i 70-im godinama 20. stoljeća Sveučilište je provelo funkcionalno-arhitektonsku adaptaciju kompleksa. Kasnija modernizacija, usklađena s oblicima militarne arhitekture 19. stoljeća, čini interesantan sklop i naglašava monumentalnost kompleksa. Početkom 21. stoljeća provedena je adaptacija zgrade nekadašnjih staja za potrebe izložbi i predavanja. Bila je to prva realizirana konzervatorska adaptacija povijesne vojne pozadinske gradnje. U zadnjem desetljeću provedena je konzervacija pročelja od opeke iz 19. stoljeća na zgradi Rektorata i Građevinskog fakulteta te na zgradama vojarni zajedno s renovacijom sačuvanih detalja i koloristike keramičkog materijala, zamjenom stolarije i bravarije na kasnije dograđenim modernistički ostakljenim pročeljima, no s očuvanjem prethodne dispozicije.

U zgradi nekadašnjega zatvora planiran je Muzej Sveučilišta u sklopu programa uspostave Edukacijsko-muzejskog centra. Izrađeni su projekti revitalizacije kompleksa kojima su obuhvaćeni konzervatorski, funkcionalno-prostorni komunikacijski problemi, te rješenja zelenih površina unutrašnjega dvorišta i nekadašnjih časničkih vrtova, revaloriziranih na granici s javnim površinama. Treba istaknuti da se kompleks vojarni, današnjega Tehničkog sveučilišta, nalazi u urbanističkoj cjelini grada upisanoj u registar spomenika kulture. Izgradnjom popratnih sadržaja tvrđave Krakow također su zahvaćeni tereni na istočnoj strani krakovske željezničke postaje, gdje je 80-ih godina 19. stoljeća podignut niz građevina različitih sadržaja koje

su činile aprovizacijsko-skladišni kompleks. Ubrzo nakon izbijanja Prvog svjetskog rata sagrađena je zgrada namijenjena smještaju vojske i skladišta, sada u funkciji Muzeja Zemaljske armije. Izvorno jednostavna i skromna arhitektura te zgrade svojim pročeljem od opeka i kompaktnom masom koja okružuje unutrašnje dvorište, karakterističan je primjer vojne arhitekture svojega vremena.

Nakon pada Habsburške Monarhije aprovizacijsko-skladišni kompleks tvrđave Krakow bio je u vojnoj uporabi sve do 90-ih godina 20. stoljeća, a onda prelazi u vlasništvo Državne riznice i privatnih osoba. Od tada je izložen postupnoj degradaciji. Danas se stanje pojedinih građevina kompleksa znatno razlikuje.

Godine 2006. bio je organiziran otvoreni arhitektonski natječaj za izradu rješenja adaptacije građevine za Muzej Zemaljske armije, a realizacija te namjere bila je provedena godine 2011. kao zajednička investicija Muzeja AK (Zemaljske armije), Vojvodstva Malopolskog i Gradske općine Krakow. Ostvaren projekt multifunkcionalne koncepcije Muzeja AK, u pogledu funkcionalnog i arhitektonsko-prostornog rješenja, uzima u obzir moderne tehnologije za potrebe različitih izložbi i edukacijski program. Osigurano je sakupljanje, restauriranje i izlaganje zbirke koje prikazuju ideju i djelatnost Poljske podzemne države za vrijeme Drugoga svjetskog rata. Arhitektonskim se rješenjem povezuje sačuvani vanjski kubus građevine, njegove fasade, a suvremena tehnologija dopušta proširenje funkcije izložbenoga prostora na unutrašnje dvorište natkriveno ostakljenim krovom te uključivanje u program simbolike muzeja i podzemnih dijelova zgrade.

Za suvremenu problematiku adaptacije nekadašnjih austrijskih vojarni tvrđave Krakow upečatljiv je primjer dobro očuvan kompleks konjičke vojarne u četvrti Rakovice sagrađen u razdoblju od 1888. do 1892. godine. Daljnji razvoj toga kompleksa spaja njegovu funkciju sa zrakoplovstvom u njegovim prvim koracima potkraj 19. stoljeća. Prvo polje uzletišta balona nastalo je godine 1894. kao prethodnica organizacije zrakoplovnih jedinica iz godine 1912., začetka kasnijeg uzletišta Rakovice-Czyżyny.

Povijesne zgrade vojarne i hangara prve zračne luke, koje nisu uništene nakon izbijanja rata godine 1939., i dalje su pod vojnom upravom. Zadnjih su godina upisane u registar spomenika kulture, što omogućuje njihovu punu zaštitu.

Neposredna blizina osnovanog Zrakoplovnoga kulturnog parka te postojeća funkcija Muzeja zrakoplovstva na području zrakoplovne luke iz 20-ih međuratnih godina 20. stoljeća daju nadu da će u

budućnosti biti moguće sačuvati cjelinu te enklave i zaštititi relikte militarnoga krajolika od navale investicija stambene gradnje.

Slično kao u Krakowu, i za militarnu izgradnju Przemysla bila je ključna odluka o gradnji tvrđave. Ona je izazvala širenje militarne infrastrukture koja je zauzela terene uz željezničku prugu, kao i prostrana područja uokolo grada na kojima su podizane utvrde i pozadinski objekti.

Izgradnja tvrđave Przemysl započela je tek u drugoj polovini 19. stoljeća jer su raniji planovi bili odbačeni, da ne bi izazvali razmirice s Rusijom. Središnji dio tvrđave obuhvatio je i sâm grad, a izgrađen je i u Galiciji najveći kompleks vojarni s pozadinskim objektima za potrebe tvrđave i vojnih jedinica (garnizona). Ti su objekti smješteni uz rijeku San i uz stratešku trasu Lavovske željeznice nadomak grada. Utvrde u pojasnom sustavu tvrđave povezivao je sustav fortifikacijskih putova dopunjen sustavom manjih kompleksa vojarni i pratećih sadržaja.

Do danas je sačuvan znatan dio još uvijek aktivnih vojarni i zidanih građevina u vojnoj uporabi, uz ostalo u vezi s pograničnim položajem grada, blizinom granice EU i Schengen-zonom.

Gore spomenuti manji kompleksi vojarni na većoj udaljenosti od grada, neadekvatni za vojne potrebe, interesantna su područja za adaptacije.

Dobar je primjer povijesni kompleks austrijske vojarne u mjestu Siedliska (općina Medyka) iz razdoblja 1880.–1900., preuređen u sklopu operativnoga programa Podkarpatskog Vojvodstva za razdoblje od 2007. do 2013. godine, te projekt na temu Kulturna ruta fortifikacijskoga turizma „Južna rokada“ u tvrđavi Przemysl. Program je omogućavao korištenje sačuvanih kubatura, arhitektonskih i urbanističkih oblika te krajobraznih vrijednosti za sadržaje i projekte u vezi s lokalnim potrebama. Taj je kompleks dijelom preuređen, uz dogradnju, za potrebe školske ustanove, a preostali dio adaptiran je za potrebe turističkog doma, izložbenoga prostora lokalnog muzeja u vezi s tvrđavom i obližnjim spomenicima fortifikacija.

U sklopu pripremnih radova izrađen je prijedlog adaptacije kompleksa (rad autora ovog članka) koji je poslužio za izradu izvedbenih projekata. Rješenja su, polazeći od povijesnih premisa, uzimala u obzir planove investitora – lokalnih vlasti.

Valja se nadati da će započete radnje uključivanja povijesnoga kompleksa u mjestu Siedliska u kulturnu rutu fortifikacijskoga turizma omogućiti očuvanje njegova osebujnog ugođaja vojarne, uz činjenicu da je riječ o naslijeđu prošlih vremena.