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*Czech cemeteries and funeral architecture
– the problem of integration with urban landscape
– research and design studies*

Introduction

Background

While in the neighbouring Poland, Belgium, the Netherlands, or Sweden the crematorium-related design and architecture, along with the establishment of new urn gardens or forest cemeteries, has been in the centre of interest, such attempts are rare in the Czech Republic. In the Czech Republic, the most widespread typological structure has been ceremony and mourning halls that were frequently constructed in the 1970s. However, at present new ceremony and mourning halls are built only occasionally and new cemeteries are rare to be established. If they are developed, the modifications are minor.

As for crematoria, their construction ceased in the 1990s and no new crematoria are planned to be built [1] despite the high number of cremations in the Czech Republic [2]. Although the Czech Republic has a sufficient number of crematoria (one or two in every region), the problem is that one half of them dates back to the 1920s–1930s, and the rest were built between 1960s and 1990s. In this way, these facilities do not mirror the needs and expectations of the current society.

When cremation became permitted by a law called Lex Kvapil in 1919 [3], twelve crematoria were built very quickly [4]. This copied the enthusiasm of the then independent Czechoslovakia and the support of a new secularized society [5]. During the 1960s, cremation, as a progressive form of funeral and civic funerals, was established by

Government Decree 396 of 16 May 1963. Since then farewell halls without cremation have been built [6].

With newly built crematoria, urn gardens have always been added. Although the Czech Republic has only 27 crematoria with an urn garden, there are 6,500 cemeteries. However, not all of the cemeteries include an urn garden or columbarium. Many cemeteries are not prepared for ash disposal, despite the fact that 80% of all burials are cremations. This poses a problem especially in cities, where higher numbers of cremations have been reported (Prague 95%, Liberec 98%) [7]. The high degree of cremation as a way of burial according to research [8], [9] is mainly influenced by the secular, socio-economic and psychological aspects which in large cities outweigh religious beliefs and the willingness to uphold traditions [8].

In 2019, the Czech Republic celebrated 100 years of cremation in the Czech lands. Since then, many architecturally significant objects have been erected, but they fail to serve the needs of the contemporary society. There are many cemeteries based on a regular grid (heritage of the Austro-Hungarian Empire) which represent the Gardens of Silence in towns with high quality sculptural art, but they are not always ready for ash disposal and new ways of burial [9]. Till today ceremony and mourning halls have been constructed, which in many cases do not meet the needs of the cemetery operators or the legal requirements. Despite a high interest in cremation, the enthusiastic start of constructing crematoria at the beginning of the last century contrasts the current stagnation. This leads to a lower interest of clients in renting a ceremony and mourning hall in a crematorium or a farewell hall without cremation for burial ceremony. Clients also show a low interest in using cemeteries with low or zero possibility of ash disposal. It brings economic problems for operators of these services, and subsequently it brings difficulties with

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Fig. 1. Olšany Cemeteries in Prague – original plague cemetery from the 18th century with a minimum space for urn or ash disposal but with a huge potential of greenery in the urban organism (photo by K. Frolíková Palánová, 2015)

Il. 1. Cmentarze Olszańskie w Pradze – oryginalny cmentarz morowy z XVIII w., z minimalną ilością miejsca na urnę lub popiół, ale z ogromnym potencjałem zieleni w organizmie miejskim (fot. K. Frolíková Palánová, 2015)

maintenance and care for the buildings and the adjacent premises. As a result, the state of the buildings deteriorates, the sites are unattended, and thus prone to the onset of vandalism. This means that if the cemeteries do not follow new burial trends, they are less used by clients.

The aim of article is to discuss how to design or redesign cemeteries and accompanying architecture, thus to re-incorporate them into the urban systems or landscape, to bring them closer to wide public, and cause interest of the government. The question that remains is the degree of possibility of application of research from the environment of the Czech Republic in other European countries, where it may not apply universally. The available publications indicate the existence of similar problems in the countries of Eastern and Southern Europe [2]. The differences may lie in the number of crematoria according to the population in other countries, but still the current cemeteries / cemeteries and buildings will age and new projects will be rare. This opens up a lot of space for revitalization projects and new architectural solutions.

The article deals with the possible contribution of the architectural solutions of the transformation of cemeteries and funeral architecture to their necessary transformation, which is conditioned by the above reasons.

Czech Cemeteries as the heritage of the Austrian-Hungarian Empire

As mentioned above, many cemeteries in the Czech Republic have been the heritage of the Austro-Hungarian Empire and are not always ready for ash disposal and new trends in burials. The old cemeteries sometimes lack scatter garden with quality grass, columbaria or other options for urn disposal. In addition, families may opt for burials/ash disposal without a ceremony. For such purposes, some cemeteries built open roofed spaces, but this is rather rare. People are interested in new trends, for example in Great Britain they may opt for a natural funeral in the forests or meadows of remembrance.

According to our research, burial facilities with limited possibilities for ash disposal, or those ignoring new trends, tend to be less used and visited, which brings problems with a lack of maintenance and care for graves by families, possibly opening ways to vandalism, mostly in larger towns [7]. In successful cases, cemeteries may function as green areas in city organisms, when their multi-purposefulness can lead to higher attendance rates and society's wider acceptance of the localities [10] (Fig. 1).

Architectonic-urbanistic concept of the inter-war and post-war crematoria as parts of urn gardens or forest cemeteries

There is a clear difference in the architectonic concept and layout plan of the cultural and technical parts of the inter-war and post-war structures in the Czech Republic. The ceremony and mourning halls built in the 1920s and 1930s have the layout of sacral space represented by a wide entrance platform, monumental entrance door, foyer with a low ceiling in contrast with an elevated space of the ceremony and mourning hall. The structures are strictly axisymmetric. An axis runs through the entrance and foyer, the aisle between the benches and culminates in the catafalque (Fig. 2). In several early structures the catafalque is separated from the rest of the room by a triumphal arc (e.g., rondo-cubist crematorium in Pardubice by Pavel Janák from 1923) [11] (Fig. 3). As a matter of course, a matroneum with an organ is also included. A spokesperson comes from a room behind the catafalque, which is equivalent to a sacristy in sacral structures. In later functionalistic and constructivist implementations, the inner space of the hall and the catafalque become one space getting rid of the triumphal arc, and in some cases getting rid of the elevated "presbytery" in the site of the catafalque (e.g., crematorium in Brno by Ernst Wiesner, 1930 [12], crematorium in Praha-Strašnice by Alois Mezera, 1932 [4]).

The main space of the ceremony and mourning hall is usually lit by vertical windows, or through the ceiling



Fig. 2. Crematorium in Liberec (1917) was the first crematorium in Czechoslovakia with an urn garden (photo by K. Frolíková Palánová, 2018)

Il. 2. Krematorium w Libercu (1917) było pierwszym w Czechosłowacji krematorium z ogrodem urnowym (fot. K. Frolíková Palánová, 2015)



Fig. 3. Entrance platform in front of the crematorium in Pardubice (1923) with a roofed staircase; in the national rondo-cubist style (photo by K. Frolíková Palánová, 2015)

Il. 3. Podest wejściowy przed krematorium w Pardubicach (1923) z zadaszoną klatką schodową; w stylu narodowego rondokubizmu (fot. K. Frolíková Palánová, 2015)

using diffused light with no views. In this way, the structures appear to be enclosed, paying attention to the deceased and the community of the mourners. An important part of the cultural premises of the crematoria is a chapel to display a coffin with the deceased near the main hall.

The post-war crematoria complexes were no longer designed as axisymmetric, save for few halls only. They do not follow the sacral tradition either. The Christian cross ceases to be a symbol, being substituted by nature, with which the crematoria are interlinked optically (e.g., crematorium in Praha-Motol by Josef Karel Říha, 1954; crematorium in Zlín by Jiří Čančík, 1970–1978 [4]).

While smaller ceremony and mourning halls in the crematoria have the capacity of about 100 people, the large ones take in as many as 300–400 people. Additional small mourning halls (as auxiliary to the larger ones) were designed to host from 10 to 20 mourners. The problem is that the crematoria lack rooms for receiving condolences or holding funeral receptions, as it is common in current Belgian crematoria [13]. As a result, in some facilities, roofed columbaria are used as substitutes for shelter for mourners waiting or for condolences.

As for the location, the inter-war crematoria were built within the premises of the existing historic cemeteries, in the centre of an urn garden. The layout of the urn gardens is regular having a clear skeleton of predefined paths. As opposed to these, the post-war crematoria were built in new cemeteries often established in connection with the construction of a new crematorium, outside the traditional historical necropolis. Because they are often located on the outskirts of cities, they take the form of forest cemeteries. The crematoria buildings are either hidden in the tree cover, or completely exposed and accentuated in the centre of the entrance platform (crematorium in Pardubice) [4] (Fig. 3). In the Slovak Republic (formerly Czechoslovakia), the crematorium in Bratislava is located at the end

of the meadow [4], [14]. Thanks for their architectonic design and locations the crematoria fulfil an important culturally-social function. In addition, they may symbolize new ideas or political ideologies of the society, e.g., the crematorium in Pardubice designed in the national rondo-cubist style, or the former cubist crematorium in Ostrava.

Ceremony and mourning halls without crematoria added to cemeteries

Only several inter-war ceremony and mourning halls were built in the former Czechoslovakia (e.g., in Brno by Bohuslav Fuchs, 1925–1927) [15]. The situation changed in the 1960s as a result of a new law, when the government aimed to substitute the sacral structures by a secularized model. Ceremony and mourning halls were built in every bigger town and their number was in the order of thousands [16]. A special government directive was issued to eliminate earlier traditions connected to Christianity arguing that those traditions are outlived and new culture of rituals needs to be adopted. To motivate citizens to avoid opting for a church funeral, a high number of new crematoria was built that were easily available especially in towns. Despite the ideological drawbacks, many significant realizations were implemented at that time, for example in Vsetín (authors J. Zbořil, M. Kadeřábek, J. Jakeš, 1977 [17]) (Fig. 4), in Luhačovice (authors F. Pala, V. Rudiš, 1978 [17]), and in Humpolec (authors J. Zbořil, M. Kadeřábek, J. Jakeš, 1977 [18]).

From an urbanistic perspective, it is important to provide a good access for the mourners and for contractors (services, waste management). Therefore, the above mentioned structures were often built at the edges of the burial sites, considering also the practicality of their proximity. At present, the deceased are often transported to the nearest crematorium for cremation, and next the ashes are buried elsewhere.



Fig. 4. High-quality architecture ceremony and mourning hall in Vsetín from 1977 with an added roofing staircase, additional heating and cooling of the central glazed space, located at the border of the existing cemetery (photo by K. Frolíková Palánová, 2017)

Il. 4. Wysokiej jakości architektura sali ceremonii i pożegnań w Vsetinie z 1977 r. z dobudowanym zadaniem schodów, dodatkowym ogrzewaniem i chłodzeniem centralnej przeszklonej przestrzeni, położonej na granicy istniejącego cmentarza (fot. K. Frolíková Palánová, 2017)

Current research

In our earlier research, we dealt with the conditions at Czech cemeteries in terms of their incorporation into the urban organisms, their function in the public space, and analysis of the user/ mourners' amenities. We examined the necropolises in the three largest cities (Praha, Brno, and Ostrava) [19], in all the 14 cities seating the regional administrative bodies [20], and village cemeteries [7].

The findings show that although cities may be perceived as live organisms, Czech historical graveyards in cities are enclosed, defined by fences or walls, thus representing grounds of isolated gardens of silence. In this way, they fail to respond to the surrounding public space. The access is limited by visitor hours, and cemeteries have become premises with low or, in the evening, zero number of visitors, and corresponding weak interaction with the surroundings [20]. Another problem is that the cemeteries do not provide sufficient amenities for visitors or mourners [20], which is related to the history behind their construction described above. Moreover, we found that cemeteries do not provide a sufficient number of, or completely lack, sites for ash disposal. The requirements for ash disposal depend on the inhabitants' religiousness, size of the municipality/ region, historical development, and the age of the cemetery [20], [7] as cemeteries established in the course of the 20th century already include urn gardens or other ash disposal options.

Due to a higher level of religiousness in villages and the country, the interest in cremation is lower there, and human remains are frequently buried. Many village cemeteries were built in the 20th century, the ash disposal options are thus sufficient. These cemeteries also usually receive sufficient care. On the contrary, town and cities are known for lower religiousness, worse accessibility of the necropolises, lower interest in grave plots, and other causes that

directly lead to a higher interest in cremation and thus requirements for ash disposal. It shows that cemeteries that have not adapted to new trends are being deserted [7].

Methods

We carried out research at 25 cemeteries, 9 crematoria with urn gardens or forest cemetery in the Czech Republic (out of 27 crematoria in total), 1 crematorium in Slovakia (out of 4 crematoria in total), and 10 ceremony and mourning halls without a crematorium. The sample of cemeteries included areas in large cities (over 300,000 inhabitants), regional cities (around 100,000 inhabitants), smaller cities (10–25,000 inhabitants) and village cemeteries so that all these categories were evenly represented. Each of these categories presents its own current issues. At the same time, the samples represent plague cemeteries founded in the 17th century, most examined cemeteries were established in the 18th and 19th centuries, but also there is a representative newer cemetery from the early 20th century. However, all of them were founded after the Josephine reforms and with regard to their conditions. The selected crematorium buildings represent examples of the First Republic buildings as well as post-war buildings. Both categories represent two different-minded companies, which are reflected in their organization, layout and architectural design. The representatives of the mourning halls substitute a sample of the first realizations from the 1970s to the present. We examined a total of 45 facilities to determine the availability of ash disposal / ballot box and other conditions.

As a method, we first chose input analyses, specifically, the studies focused on the following categories of research: interviews with facility operators, a precise description and examination of the selected sites and objects visited. Subsequently, the weaknesses of each building

or cemetery were specified and quantified. The research focused on the existence and type of space for mourning gatherings, a place for a ballot box, and a room or a covered open space for post-ceremony condolences. Furthermore, we analysed the background for visitors to the cemeteries monitored in terms of space for rest in bad weather, a place for quiet, meditation, prayer, the existence of a flower shop, candles and places with refreshments and, of course, toilets. We were also interested in transport accessibility, whether individual or public, the distance from residential centres and the quality of internal communication roads. The information obtained was supplemented by data from available literature, both local and foreign, particularly to highlight strengths, and to identify the current trends in the development of crematoria.

Next, the identified weaknesses were reframed as challenges and fundamental opportunities for transformation of crematoria, ceremony and mourning halls, and adjacent cemeteries. The research described here has been applied to the topics of university students' Master and Bachelor Theses at the Department of Architecture, VŠB-Technical University of Ostrava.

Thus, analyses obtained from knowledge of the authors of the paper, their students, representatives of the towns and cities, and the cemetery operators were used for ideological student design and proposals. They focused on how to transform the existing skeleton graveyards into urn gardens, or parks, which would complement the graves with scattered gardens or columbaria. Next, the solutions suggest improvements in mourners' amenities. As a result, 2 student proposals supervised by the article authors are featured in the following section.

Results and discussion

Through observations and interviews, we identified weaknesses and room for improvement in Czech crematoria, ceremonial and mourning halls, which we compared with solutions in foreign realizations.

Having compared the crematoria and mourning halls premises, the research results show significant drawbacks in the layouts. What is typically missing is a private space for the mourning relatives / family before the ceremony. If there is such a space, it is only a temporary solution, and it is the space originally meant to be used by the staff. No facility has a specific space dedicated to condolences and often lack dignified space for the display of the coffin for the mourners to pay their respects. Some buildings have inconvenient interiors, they lack dignified entrance platforms or staircases that may help mourner / visitors to enter into the mood of a ceremonial moment.

Moreover, in 89% of the buildings, the mourners of two successive ceremonies get mixed up, which makes the operation of the premises more difficult. The clients may perceive this in a negative way due to reduced dignity of the ceremony and a certain uniqueness of each funeral, also ensuring privacy. The operators confirmed the negative feelings and navigate the problem via display of clearly visible signposts to inform the mourners about the direction to go. It would be more practical to have a differ-

ent exit, for example as in the crematorium in Bratislava, Slovak Republic [4], [14] and solve this problem during architectural design.

Next, we looked whether the crematoria have a storm porch, and found that 33% of the buildings do not. Such a porch protects mourners from severe weather before the ceremony, but could be used as a space for condolences, or an extra space for mourners during highly visited funerals. We also inquired about the thermal comfort. In 22% of the premises, the thermal comfort inside the buildings was low during the year.

In crematoria, we observed to what extent the path of the deceased interlink with the mourners' path. Unfortunately, the two paths cross usually only during the ceremony and mourning hall. Some buildings offer the option to accompany the deceased all the way to the cremation as it was, for example, designed in the 1960s during building the crematorium in Bratislava designed by Ferdinand Milučký [4]. For this purpose, the layout offered a room separated by a glass wall. Such an option was offered in some crematoria ex-post, but only in 30% of the buildings under investigation. In addition, in 60% of the observed crematoria, the path for the deceased through the utility rooms is very long all the way to the ceremony and mourning hall, which makes the dignified handling of the body more difficult.

Although we can follow trends in contemporary funeral architecture and urbanism, we cannot use successful examples from abroad without knowing the traditions and needs of each society. For example, when analysing the implementation of the crematorium at Woodland Cemetery in Stockholm, Sweden [21], a very small farewell room is typical for invited guests only. In the Czech Republic, funeral ceremonies are often attended by the general public without being explicitly invited. This is the reason for the design of spacious ceremonial and mourning halls. Another example is the possibility of integrating the cemetery complex into the organism of cities. The Nordic realizations, which are under the diction of the church denominations other than the Roman Catholic Church, which is most widespread in Central Europe, understand the cemetery as a public space, only symbolically defined and enabling activities that are unacceptable in the Roman Catholic tradition. Although the Czech Republic is characterized by a high degree of secularization, the cemetery is still perceived as a sacred space, a strictly defined garden of silence, without the possibility of cycling or entering with a dog. In addition, Central European cemeteries are only accessible for a limited time during the day. Although 19% of the surveyed cemetery visitors can imagine or wish to have some form of refreshments on the cemetery premises (this service is completely missing in Czech cemeteries and crematoria), it is equally difficult to accept the idea of having a café overlooking graves, such as at Brompton Cemetery in London, even at the edge of the grounds. From this point of view, the transformation of Czech cemeteries seems more appropriate in terms of the availability of sites for ash storage, which is now a very popular form of burial. The transformation of defunct cemeteries into parks is already traditional, as we

can see in Ostrava in the locality of Husův sad, Milady Horáková Park, etc. or e.g. the defunct original cemeteries with some important tombs around the churches (e.g., around St. Nicholas in Ostrava-Poruba). This route seems to be suitable for solving the future of declining cemeteries, mainly in large cities, i.e. by gradually removing the tombstones of extinct graves and transforming the place into a city park. Taking care of such an area would reduce the vandalism that is seen in the little-visited cemeteries of large cities. The context of the place can be highlighted by landscaping, which will state the uniqueness of the place.

Since the 18th century, cemeteries have been situated outside towns. Some of them fused with the city organisms in time due to development, but they may still be very far from the city centres and highly frequent sites in the city. Therefore, better accessibility and shorter public transport routes are desirable, as well as considerations of reconnecting these often isolated places to the urban organism by a suitable urban solution. Ceremonial or symbolic connection of villages with allocated cemeteries in the landscape also seems to be suitable for solutions in the future, as shown by the following ideological student work.

The procession pathway

This proposal aims to solve a low interaction of a cemetery with the adjacent municipality, better incorporation into the landscape, lack of sites for ash disposal, and thus overall leading to an adequate funeral architectural design. The student's work also proposes a new cemetery near a spa town of Velichovky [22].

The existing cemetery in Velichovky, which is used to its limits, is located around a church in the centre of the town. As the town is short in plots for development, we found a plot near the town, a locality called Bůhdal (God's gift), which is well suited for the construction of a new cemetery. Formerly, a farm used to be situated there, but only an overgrown grove is to be found there now.

The proposed new cemetery would be situated outside the town, but would be connected with the existing cem-

etry via a procession pathway as a symbol of continuation and next generations. Walk-through premises thus become parts of the landscape and an imaginary centre between five municipalities, the citizens of which may also use the cemetery for burials or ash disposal. In the proposal another dominant path enriched by an alley was selected so that the necropolis could be accessed from two different directions. The elevated locality, where a former farmstead as a centre of prospering and locally important agricultural residence was located, only emphasizes the uniqueness and significance of the locality. The two ellipses of the roads form a symbolic number "eight", the sign of infinity, which expresses the infinite course of life, with its births and deaths, where one conditions the other [23]. A constituent of the procession path is the existing crucifix, which is located on the axis against the entrance gate and at the same time close to the ellipsis (Fig. 5).

Although the premises are fenced, as the tradition ordains, the complex well communicates with the landscape and makes its natural part. The lines of the procession paths connect the cemetery with the surrounding towns/villages, where the path enables the access, transit, and space for meditation at the different stages of the procession pathway.

The landscape itself and the heritage of the former farmstead helped to create and identify new symbols, which are rather hard to find in the predominantly secularized society. Despite a significant departure from traditions, the need for symbols in the landscape is endless. Symbols become destinations or connecting points on journeys, and certain anchors in the atheistic society. In the case of a cemetery, the desire for symbols increases, often in an attempt to explain death [24].

The cross/crucifix has been the symbol for centuries. In the locality, one is situated near the church and the existing cemetery in Velichovky, i.e. at the start of the procession pathway. Next, there is another, already existing, cross on the axis towards the major entrance into the new proposed, which is incorporated into the new layout. At the end of the procession pathway, in the town of Hustiřany, there is an existing stone crucifix.



Fig. 5. Interconnection of two towns by procession pathways which form the sign of infinity in the premises of the newly designed cemetery (source: [22])

Il. 5. Połączenie dwóch miast ścieżkami procesyjnymi, które tworzą znak nieskończoności na terenie nowo projektowanego cmentarza (źródło: [22])



Fig. 6. A columbarium in front of the ceremony and mourning hall (a); and an outdoor chapel/pavilion (b) (source: [22])

Il. 6. Kolumbarium przed salą ceremonii i pożegnań (a) oraz kaplica/pawilon na świeżym powietrzu (b) (źródło: [22])

Another symbol is nature itself. Nature has been a frequent symbol in the funeral architecture since the 2nd half of the 20th century to date [19]. In the proposal, nature is represented by the landscape surrounding the towns/villages, through which run the procession pathways. The pathway connects to a cycle route, in this way enriching the landscape with another element. The original grove with full-grown trees is suitable to form a natural chapel, where ashes may be disposed near the roots of the full-grown as well as newly planted trees in line with the trends of the so-called natural burials [5]. In the proposal, an elevated meadow near the forest is chosen to locate the cemetery, which emphasizes the significance of the site and where the access pathways arrive from the neighbouring municipalities. The nature is omnipresent, in the premises of the cemetery, in views, in the graves as well as the sites for ash disposal.

The third symbol is the sign of infinity incorporated into the shape of the major roads in the cemetery. The sign of infinity, “the horizontal eight” as the Czech people say, has a number of historical connotations in the Czech history. Many years of the past century that played an important role in the Czech/Czechoslovak history include the numeral “eight”, e.g., 1918, 1938, 1948, 1968, 1989 (only as far as the 20th century is concerned, but the beginnings date back to 658 and continue throughout the whole Czech history) [25].

The premises of the cemetery were complemented with a ceremony and mourning hall and a columbarium in the front of the hall, and an outdoor chapel/pavilion for ceremonies during ash disposal or for meditation, as well as space for relaxation for the visitors (Fig. 6).

In the layout of a ceremony and mourning hall there is sufficient entrance room – an entrance platform for funeral ceremony visitors/mourners. The roofing of the entrance platform makes space for the columbarium. The hall is preceded by a foyer, which may be used as an extension of the ceremony and mourning hall if needed. The view from the hall goes in two directions, but both view the man-made zen garden. The catafalque culminates as a strictly symmetric feature in the hall, the coffin may be carried away along the central aisle for burial, or it enters behind a screen after the ceremony, where the move-

ment simulates the placement of the coffin into the grave. From there, the coffin is transported for cremation. At the same time, the space behind the catafalque is screened off by a glass wall and serves for private viewing of the deceased to pay farewells by the family before closing the coffin.

The layout of the utility rooms is very simply designed in one line to minimize the coffin handling, from the arrival and placement of the body in a refrigerator room, via the room for body preparation, all the way to the private/public viewing and the ceremony in the ceremony hall. Considering the expected low number of funerals in the locality, it was not necessary to deal with the issue of two successive funerals.

In case of natural funeral rituals held in the church in Velichovky, the coffin is carried along the procession pathway culminating near the wooden crucifix in the premises of the cemetery. In the case of ash disposal, which occurs as late as two months after cremation, the natural chapel may be used for an accompanying ceremony so that the moment could become an opportunity to celebrate the life of the deceased and a dignified escort to the site of final disposal.

Utmost care is dedicated to the maximum interconnectedness of the path of the deceased and the path of the mourners. In addition, the natural chapel may be used as a shelter to protect the mourners or travellers against severe weather, or as a space for meditation.

The cemetery also comprises auxiliary facilities, mainly situated near the main entrance. There is the entrance gate and reception, toilets, staff rooms, and a flower shop. There is also an optional space for a funeral home office. However, there is no space for funeral receptions. Relaxation/meditation for the visitors of the cemetery is possible in an outdoor chapel.

Conclusions

The article points at the need to re-initiate the discussion on the topic of cemeteries and funeral architecture in the Czech Republic, where the construction of such facilities and related architecture is stagnating. A convenient year for this is a one-hundred-year anniversary of crema-

tion in the Czech lands, when the conditions are reviewed and new future directions are searched for.

The article features two students' proposals. The study of Velichovky and Hustřířany cemetery well manifests how the premises of a cemetery may become parts of the landscape and life in several towns and their citizens. Thus, it is possible to interlink several functions which the premises are able to offer and are ready not to deny. Due to the location and interpretation as well as interconnection of two towns, the author managed to demonstrate how a cemetery may enrich the landscape and return to the roots of life and death. The study works with the landscape as it becomes a part of both the towns and it expects that the cemetery shall become a destination for many visitors not only to care for the graves, but also provide opportunities for walks, meditations, rendezvous, and be treated as a tourist destination. In this way, it may become an ordinary part of the citizens' everyday life in the given and surrounding towns and villages. It may become a landmark that may help to rediscover the topically of the questions related to funeral ceremonies. As mentioned above, higher attendance at cemeteries leads to lower possible vandalism. The solution meets the needs of the contemporary society and is sustainable for the future.

Due to the traditions that are still perceived despite a considerable degree of secularization, the introduction of new functions in cemetery areas or previously unused recreational opportunities in strictly defined consecrated areas cannot be expected and anticipated. On the contrary, it seems appropriate to support the centuries-old tradition of cremation, which is a very developed way of burial in the Czech Republic, and to adapt the existing cemeteries,

which now allow burials in graves, for the possibility of storing ashes. By integrating the premises into the city or connecting the cemeteries outside the village to the countryside, it would still be possible to involve these places in the lives of residents and increase their attendance (to re-perceive death as part of life, larger, more secularized cities).

The transformation of mourning halls and crematoria, increasing the ceremoniality of architectural spaces, establishing the possibility of a dignified exhibition of the deceased before the funeral for the last farewell, connecting the cultural and technical part of crematoria for accompanying the bereaved to cremation, for the needs of today's society.

The research will continue with the specification of other services that are or may be offered at different funeral facilities in the Czech Republic in contrast with abroad. We are particularly interested in the attendance rates of urn gardens and cemeteries located at the town peripheries. Next, we are going to map the needs and expectations of cemetery visitors and citizens in towns, with a particular interest in those who may not have a reason to go to cemeteries under the current conditions. The aim is to find solutions, possibly via identifying the missing services to increase the attendance rates and possibly increase the interest in the care for their deceased, reduce the incidents of vandalism in remote localities, and arouse interest in the sepulchral art and cultural-social legacy.

The study may be interesting also in countries with similar stagnation of cemetery and crematoria construction, such as Slovakia or Romania, where neither new secularized funeral architecture nor urn groves are built.

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References

- [1] Frolíková Palánová K., Juračka O., Černá B., Dubovský L., Nahodilová Š., *Application of the current knowledge from research and development of the burial methods and their impact on designing or transforming contemporary cemeteries in the Czech republic*, [in:] *Sborník vědeckých prací VŠB-TUO, řada stavební*, VŠB TU Ostrava, Ostrava 2017, nr 2, 1–12.
- [2] Frolíková Palánová K., Juračka O., *Transforming the requirements for the modern architectonic design in terms of the placement of human remains*, [in:] *Sborník vědeckých prací VŠB-TUO, řada stavební*, VŠB TU Ostrava, Ostrava 2017, nr 17, 13–24.
- [3] Mencil F.X., *Pohřeb ohněm: několik kapitol o zpopelňování mrtvých*, Krematorium, Prague 1922.
- [4] Svobodová M., *Krematorium v procesu sekularizace českých zemí 20. století: ideové, stavební a typologické proměny*, Artefactum, Prague 2013.
- [5] Frolíková Palánová K., Juračka O., Kovář J., Dlábková I., Babor T., Janda J.P., *Quantitative and qualitative differences in selected Prague cemeteries*, [in:] M. Ali, P. Platko (eds.), *Advances and Trends in Engineering Sciences and Technologies. Proceedings of the International Conference on Engineering Sciences and Technologies, 27–29 May 2015, Tatranská Trava, High Tatras Mountains – Slovak Republic*, CRC Press, London 2015, 347–352, <https://www.taylorfrancis.com/chapters/mono/10.1201/b19249-63/quantitative-qualitative-differences-selected-prague-cemeteries-mohamad-ali-peter-platko?context=ubx>
- [6] Toman J., *Scattering and spreading. Advanced storage of cremated remains*, Society of the Friends of Cremation, Prague 1983.
- [7] Frolíková K., Peřínková M., Dlábková I., *Revitalisation of historic public cemeteries in central zones of Urban areas*, "WIT Transactions on Ecology and the Environment" 2017, Vol. 223, 147–158, doi: 10.2495/SC170131.
- [8] Morar S., Topîrcean E., Peteanu I., *The cremation-burial dilemma: opinions of future health professionals*, "Romanian Journal of Legal Medicine" 2017, Vol. 25, Iss. 3, 303–308, doi: 10.4323/rjlm.2017.303.
- [9] Víchová I., *Bio pohřbívání: Strom života aneb Zasadte si své blízké*, "Žena" 2015, <https://zena.aktualne.cz/volny-cas/bio-pohrbivani-strom-zivota-aneb-zasadte-si-sve-blizke/r-i:article:809765/> [accessed: 25.03.2021].

- [10] Evensen K.H., Nordh H., Skaar M., *Everyday use of urban cemeteries: A Norwegian case study*, "Landscape and Urban Planning" 2016, Vol. 159, 76–84, doi: 10.1016/j.landurbplan.2016.09.019.
- [11] Lukeš Z., Panoch P., *Století moderní architektury v Pardubickém kraji*, Helios, Pardubice 2006.
- [12] Pelčák P., Wahla I., *Ernst Wiesner*, Obecní dům Brno, Brno 2005.
- [13] Claus en Kaan architecten, *Crematorium Heimolen*, "A + U-Architecture and Urbanism" 2010, No. 1/475, 118–123.
- [14] Svobodová M., *The Route to the Bratislava Crematorium*, "Architektura & Urbanizus" 2018, Vol. 52, No. 1–2, 150–151.
- [15] Kudělka Z., *Bohuslav Fuchs*, Nakladatelství československých výtvarných umělců, Prague 1966.
- [16] Sedláček J., *Obřadní síně*, Krajské kulturní středisko, Brno 1987.
- [17] Chromková L., *Smuteční síně na Valašsku v období socialismu*, diploma thesis, Univerzita Palackého v Olomouci, Filozofická fakulta, Katedra dějin umění, Olomouc 2016.
- [18] *Humpolec a okolí. Architektura 1900–2014/Humpolec and surrounding. Architecture 1900–2014*, D. Merta (ed.), Architektura & Galerie Jaroslava Fragnera, Prague 2014.
- [19] Frolíková Palánová K., Juračka O., Kovář J., Dlábková I., Babor T., *Role současné křesťanské architektury v sekularizované společnosti České republiky/The Role of Contemporary Cremation Architecture in the Secularized Society of the Czech Republic*, [in:] *Architektura v perspektivě 2015: sborník příspěvků z mezinárodní konference*, VŠB-Technická univerzita Ostrava, Ostrava 2015, 54–57.
- [20] Frolíková Palánová K., Juračka O., *Sustainability of existing areas of historic cemeteries in the city organism: A Czech case study*, [in:] *2nd International Conference on Sustainable Development in Civil, Urban and Transportation Engineering (CUTE)*, Ton Duc Thang Univ, Ho Chi Minh, Vietnam 2018. "IOP Conference Series: Earth and Environmental Science" 2018, 143, doi: 10.1088/1755-1315/143/1/012052.
- [21] Celsing J., *The New Crematorium – The Woodland Cemetery*, "A + U-Architecture and Urbanism" 2016, nr 547, 90–99.
- [22] Černá B., *Forest cemetery with buildings of sculptural and funeral architecture. Velichovky*, diploma thesis, VŠB-TUO, Faculty of Civil Engineering, Ostrava 2016.
- [23] Jonas H., *Princip odpovědnosti*, Oikoymenth, Prague 1997.
- [24] Špatenková N. et al., *O posledních věcech. Výbrané kapitoly z thanatologie*, Galén, Prague 2014.
- [25] Pekař J., *O smyslu českých dějin*, Rozmluvy, Prague 1990.

Abstract

Czech cemeteries and funeral architecture – the problem of integration with urban landscape – research and design studies

One hundred years after the first cremation, the Czech Republic is facing stagnation in the development of cemeteries, crematoria, and funeral architecture. The stagnation is caused by a low interest of both the society and the government. We carried out interviews and field research to specify the strengths and weaknesses of 20 funeral facilities (cemeteries, crematoria and ceremony and mourning halls) and to discuss new directions of development. Based on the interviews and analysis of the sites, we evaluated the needs and requirements of the current society and funeral facility operators. We also present one student work to propose how to deal with the identified weaknesses. It shows that it is very advantageous to design new facilities mixing the knowledge of the nation's traditions, new trends, and the society's customs. Through an innovative approach, even cemeteries that are placed outside towns may become functional parts of the landscape, for example through interconnecting several neighbouring villages and via creating new landmarks.

Key words: cemeteries, crematoria, funeral architecture, burial, land use planning, mourning

Streszczenie

Cmentarze i architektura funeralna w Czechach – problem integracji z krajobrazem miejskim – badania i studia projektowe

W Republice Czeskiej sto lat po pierwszej kremacji nastąpiła stagnacja w rozwoju cmentarzy, krematoriów i architektury funeralnej. Stagnacja ta spowodowana jest niskim zainteresowaniem zarówno społeczeństwa, jak i rządu. Autorzy artykułu przeprowadzili wywiady i badania terenowe w celu określenia mocnych i słabych stron 20 obiektów pogrzebowych (cmentarzy, krematoriów oraz sal ceremonialnych i żałobnych) oraz omówienia nowych kierunków rozwoju. Na podstawie przeprowadzonych wywiadów i analizy obiektów dokonano oceny potrzeb i wymagań obecnego społeczeństwa oraz operatorów zakładów pogrzebowych. Przedstawiono również jedną z prac studenckich, w której zaproponowano sposoby radzenia sobie ze zidentyfikowanymi słabościami. Pokazuje ona, że bardzo korzystne jest projektowanie nowych obiektów łączących wiedzę o tradycjach narodu, nowych trendach i zwyczajach społeczeństwa. Dzięki innowacyjnemu podejściu nawet cmentarze położone poza miastami mogą stać się funkcjonalnymi elementami krajobrazu, na przykład poprzez połączenie kilku sąsiadujących ze sobą wsi i stworzenie nowych punktów orientacyjnych.

Słowa kluczowe: cmentarze, krematoria, architektura funeralna, planowanie przestrzenne, żałoba

