

Transactions of the VŠB – Technical University of Ostrava

Civil Engineering Series, Vol. 17, No. 2, 2017 paper #21

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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

Abstract

Considerable transformation of the burial method at the turn of the 19th and the 20th centuries is apparent from the existing results of research in the developments of burial and funeral architecture, when after centuries controlled by the church - due to social and political changes gradual secularisation of the society and subsequent desacralisation of funeral rituals started appearing. This phenomenon, as well as other aspects (e.g. Josephine reforms in 1782) brought about a change in the approach to newly established cemeteries but also the necessity to define areas for new burial methods and constructing new building types of funeral architecture. The position of necropolis is also changing as the society understands it, and its inclusion not only in the organism of towns but also in everyday life of town and municipality citizens. Thus, not only new but mainly original cemeteries are searching for their new position in the society. Studio papers try to react to this situation written by students of the master degree of the specialisation Architecture and civil engineering at the Faculty of Civil Engineering at the VŠB - Technical University in Ostrava, led by prof. Ing. arch. Petr Hrůša, doc. Ing. Martina Peřinková, Ph.D. and Ing. arch. Klára Frolíková Palánová, Ph.D. Students try to view necropolis in an innovative way and give them a new dimension to succeed and become adequate public or semi-public space of cities and municipalities. The contribution represents starting points of possible solutions on case studies, such as transformation of a cemetery in Ostrava on the Hulváky Hill, the design of establishing a new cemetery in open space near the municipality of Velichovky, including the design of a funeral hall, situating a new urn grove in the place of a former cemetery - the current park - a part of which is the design of a new crematorium in Nový Jičín and extension of possibilities for placement of ashes and designs supporting the development of funeral tourism in the Olšany Cemeteries in Prague.

Keywords

Cemeteries, columbarium, urn grove, funeral hall, crematorium, secularisation

1 INTRODUCTION

Funeral rituals have been changing together with the development of social and political situations as well as with the changing level of citizens' religiosity and under the influence of the

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church. Thus, important milestones included the Decree by Charles the Great in the year of 789 prohibiting cremation. It was respected for the next 11 centuries; in some countries (e.g. in Romania with a considerable impact of the Romanian Orthodox Church) it has been - just with small exceptions - observed until today.

The original placement of necropolis around churches, i.e. in the centre of municipality life, brought by Christianity, was disrupted by the Joseph's reforms in the year of 1782, when cemeteries were forced out of settlements due to unbearable hygienic conditions and repeating epidemics. Further, the development of towns and their changing organism and a considerable increase in the industry stimulated not only the formation but also termination or transformation of original cemetery grounds.

At the end of the 19th century, considerations about cremation returned which gradually transformed into practice and presented as the hygienic burial method. Thereby, the process of possibility to return the deceased among living persons was started up, which was applied in Czechoslovakia by the newly founded Czechoslovak Hussite Church (1920), placement of urns with ashes directly in prayer rooms and churches. This was enabled by a newly passed act (Lex Kvapil 1919) enabling (not admissible in Austria-Hungary) burial of cremated remains.



Fig. 1: Hus' House, Olomouc (Source: authors)

Simultaneously, then the gradually emerging secularisation of the society was deepened by the unprecedented course and consequences of the World War I (p. 17 [4]), which finally resulted in considerable changes in opinions on the burial method and leading funeral rituals, at present up to the socially unbearable number of funerals without ceremony but also social funerals (35-40%, [7]). Adopting the new burial method was topped off with the result of the Second Vatican Council (1962-65) which accepted cremation as a possible burial method (not recommended one).

The aforementioned viewpoints accelerated transformation and formation of new cemeteries but also termination of original ones to an extent unprecedented so far. In the Czech Republic, the number of cremations of the total number of funerals increased to 75% (in Prague up to 98%), whereby our republic occupied the first place in the number of cremations as compared to European countries. As a result, the demand for skeleton graves decreased considerably. Cemeteries that have not adapted to new requirements for placement of ashes are being gradually deserted (it does not

concern localities with high citizens' religiosity). These, also due to insufficiently elaborated legislation, fall into disrepair, become overgrown, and are attacked by vandals.

Some cemeteries are sometimes located on the outskirts of the towns and thus they are on the edge of society's interest. Cemetery public spaces are organized too uniformly without spiritual overlap. Such spaces do not offer the visitor a suitable space for silence.

Therefore, the students of master degree in Architecture and Civil Engineering at the Faculty of Civil Engineering, VŠB-TU in Ostrava designed various proposals for solutions.

The designs link an individual approach to the tomb site, quality of public space, emphasis to urban concept, possibility of silence in space and time, symbolism with spiritual overlap.

The aim of this article is to introduce several possibilities how to organize cemetery public space and funeral architecture focusing not only on the dead, but also on the visitors.

2 TRANSFORMATION, FORMATION AND TERMINATION OF CEMETERIES AND FUNERAL ARCHITECTURE FROM THE PERSPECTIVE OF STUDENTS

2.1 Ostrava

The cemetery in Ostrava-Mariánské Hory established in 1903 on the originally rectangular ground plan experienced such destiny. In 1960, it was partially abolished due to the necessity of extension of the Vítkovice Ironworks and unbending busy Železárenská Street. The ground plan trace received the triangular shape. Burning into graves was prohibited in the 1970s and the whole locality was in decline, which was supported by the vicinity of a socially excluded locality.



Fig. 2: The current state of the cemetery in Ostrava – Mariánské Hory, the view through the cemetery at the Vítkovice Ironworks (Source: authors)

The possible future of the cemetery was solved – upon the request of the mayor of the city districts of Mariánské hory and Hulváky – by students of the master study programme Architecture and Civil Engineering at the Department of Civil Engineering, the VŠB - Technical University in Ostrava in the academic year 2011/2012. The paper by the student Lenka Kolarčíková is worth mentioning who has created semi-public space exactly defined with a wall. She considers the separation of the grounds to be necessary, with respect to the ordinary and dismal character of the surroundings. However, fencing is symbolic immortalisation of deceased persons, whose names are inscribed there. She transforms the cemetery into a cemetery park by the gradual abolishment of deserted graves. "The cemetery park will have the character of well-maintained intensive lawn

equipped with park movables. The original system of pavements and lanes has retreated and has been transformed into continual space with tombstones overgrown with lawns. Slow transformation into meadow burial grounds will result in creating a pleasantly romantic and poetic place." p. 125 [5]

On the contrary, the student Martin Machů again renewed the original function of the cemetery just by using new elements of funeral architecture, i.e. with the design of a funeral hall and sufficiently dimensioned columbarium lining the cemetery area and – together with other possibilities of placement of urns and scattering – enabled respectable placement of ashes.



Fig. 3: Visualization of proposal for renewal of the cemetery in Mariánské Hory, author Martin Machů (a funeral hall in the left, the adjacent covered columbaria, meadow grounds for scattering in front of them, and the memorial of Nazism victims in the right lower corner) [6]



Fig. 4: Cemetery in Albrechtice nad Vltavou (Source: authors)

3.1 Velichovky

The subtle decline and abandonment of the cemeteries is in contrast to what cemeteries meant from the past for the society and municipalities. They represented both material and mental maturity of municipalities that formed them with respect by means of its aesthetic feeling. Local artists with a higher or lower level of talent thus participated in "decoration", using local materials and customs. A suitable example is the cemetery in Albrechtice nad Vltavou in South Bohemia where the local parish

priest Vít Cíz had (with assistance of other parishioners) the cemetery lined with a wall in the middle of the 19th century, composed of 85 small chapels standing near heads of the individual graves, and painted and described scenes show life of the deceased who is buried here.

Thus he supported the human memory and even after years he helped keeping memories of those who lived here before us. The contemporary modern society has already a different attitude to these topics, and generally anything concerning funeral services or death as such is pushed away to the very edge being aimed at tabooing. Ritualized mourning disappeared when mourning people shared their memories collectively. On the contrary, today it is rather common to suppress one's own emotions and experience grief in privacy. Thus, the necessity to respect traditional rituals ceases to exist, also including so important farewell with the deceased during funerals. And the "ritual is according to the French theorist of culture Pierr Bourdie what holds cultural and economic estates across the whole world and over time together." [8]

The development of architectural forms for practising the funeral ritual is also connected with that; of course, the funeral ritual reacts to tendencies of our society more and more heading towards the civil and secular character. The attitude to the cemetery as public open space that was a part of the centre of events in the municipality in the past is a rather atheistic matter today due to abstraction of religious symbolism (since the half of the 20th century). Church ceremonies have been gradually replaced with cremation and civil funerals, with which the new concept of funeral halls is related, becoming more attached to nature as a transcendental element. This principle of interconnecting the funeral ritual with the surrounding greenery and merging with nature is applied maximally when establishing forest cemeteries. One of several starting points how to react to "removal of gods" of the society is certainly firm anchoring in nature, and the subject of the diploma thesis by the student Barbora Černá is also based on that on which she worked in the academic year of 2015/2016 and which dealt with a new forest cemetery near the municipality of Velichovky.

This idea has a basis on tradition of forest cemeteries in the Czech Republic. Tomáš Baťa, eminent Czech industrialist, submitted to municipal council in Zlín in 1930 a proposal to build a forest cemetery there. This cemetery was realized and is the place of the rest of the founder himself. It was inspiration for later realization in other Czech towns and villages as contrast to overcrowded necropolis in the Czech Republic.



Fig. 5: Visualisation of the view at the newly designed cemetery grounds with the marked curve of roads, the funeral hall in the middle, the main entrance with background in the left and in the front, published in [1].

The basic concept of the cemetery is based on transformation of the idea of continual blending of life and death (depicted with the curve of infinity) into urban, operational and architectural solutions. The chosen organic shape of roads enables slow and gradual induction of the spiritual atmosphere of the place. The visitor has enough space to calm down and imaginary separation from the ordinary world. One of the most important ideas of the diploma thesis was to design a natural forest cemetery in the spirit of "garden of silence" where a calm environment is being opened up for living persons for meeting with death and their later way through grief. In a targeted way, it is aimed at loosening of the whole grid of grave fields and blending with greenery. The contemporary expression of burial grounds with densely distributed stone graves is suppressed here. The result of the diploma thesis is symbiosis of funeral architecture with the landscape creation, for the purpose of creating a natural reverential place for respectful farewell and eternal sleep.

The newly designed forest cemetery is situated in the locality of Bůhdaly near the municipalities of Velichovky and Hustířany (Eastern Bohemia). The capacity of the existing cemetery in the municipality of Velichovky is not sufficient taking into consideration the limiting conditions of its possible extension, and an alternative burial method for cremation is missing here. In order to strengthen the link of the existing reverential place in Velichovky and the new locality of the forest cemetery, several symbolic places of the artistic character and one-sided lines of trees accompanying on the way will be designed will be designed along the joining road.

The new burial area (6.7 ha) is planned with respect to using it as a catchment cemetery for the nearest rural settlements within the distance of 5 km. The division of the cemetery defines the areas for various types of burial – from the traditional interment and urn grove up to columbaria or non-traditional placement of ashes of the deceased next to the bottom parts of trees. The whole area of the cemetery is defined with the grid of stone pavements, dividing the burial area into smaller segments, completed with smaller groves or low shrubs and meadow grasses. The visitor is surrounded only by omnipresent sounds and colours of nature, and the forest and field scenery in the background lets the reverential ceremony to die away.





Fig. 6: Visualisation of the design of the interior of the funeral hall and the adjacent water surface [1]

The design and operation of the cemetery in the diploma thesis include three separate buildings – a funeral hall, administrative building, forest chapel - and supplementing movables together with an ecumenical cross. "All these buildings are architecturally depicted by means of similar expressional elements. When designing, the key aspect was harmony with the neighbouring nature as well as respecting the rural scale of buildings based on the given environment and genius loci." [1]

The forest chapel situated near the edge of the existing grove in the place of original traces of a farm which has ceased to exist will express the memory of the history of the given place.

"The funeral hall is embedded into the middle part of the cemetery area, which considerably highlights its importance within the whole of the cemetery and at the same time continues in the idea

of intersection of the earthly life with such an abstract and transcendent term as death." [1] With a suitable disposition layout, the respectable course of the funeral is achieved when the interior equipment enables both civil and traditional religious ceremonies. Unlike sacral buildings coming from the liturgical space, the emphasis is rather placed on interconnecting the ceremonial hall with the surrounding nature – the countryside reflected on the water surfaces in semi-closed courtyards. However, the inspection opening directly to the grave fields from the funeral hall would be undesirable; therefore incomplete closing of the adjoining courtyards by means of wooden lathes is used.

Thanks to a skylight and glass ceiling in the central band of the hall, indirect, scattered light is coming inside, at the same time evoking interconnection with the heavenly world. A catafalque is placed on a raised step in the main central axis, directly in front of the main entrance, thus it becomes the most important point to which all attention is attracted.

3.2 Nový Jičín

The student Ondřej Juračka in the academic year of 2015/16 worked on his diploma thesis called "Crematorium with innovated view at funeral culture" a part of which was solution of a new urn grove and crematorium in Nový Jičín, in the locality of the former summer cinema in the Smetana Orchards in the vicinity of the Spanish Chapel. A large park a part of which is Mendl's tree and Mendl's sculptural group was used as burial grounds in the past, and due to the Joseph's (hygienic) reforms it was transported to the edge of the settlement. The Spanish Chapel, Built in 1621 on the site of buried Spanish imperial units, was changed as a result of a reform in salt store. Chapel was reordained in 1841. Cremations enable to return the necropolis to the organism of the city, and this argument was used for the selection of the locality of the solution place. Therefore, it is possible to return with this operation to the original position of the cemetery, and thus use not only the good accessibility to the city centre but by means of the existing Spanish Chapel to develop the potential of the sacral environment completely. The result should be a newly created public space in the axis interconnection to the aforementioned chapel that is becoming a part of the existing park in the place of the former cinema non-functional today.



Fig. 7: Visualisation of the design of the forest chapel in Velichovky [1]

Entrances to the grounds react to the current situation and position of roads in the adjoining park and in the surroundings of the Spanish Chapel. The grounds are completed with a restaurant interconnecting the world of everyday life in the surroundings of a hospital and park nearby with the world of dead persons, and it also becomes a part of funeral rituals. The columbarium itself is closely related to the crematorium building. They are closed and covered courts with a separate chapel. Such arrangement is to provide more privacy to visitors and enable to spend time in a more intimate environment. The centre of each courtyard is occupied with an uncovered garden bringing calm for living persons.

The overall concept of the urn grove but also the crematorium building concept, includes the concept of symbolism of circles. Circles define the individual segments of scattering, pouring, places for placement of urns into the earth (marked with epitaph plates), as well as other landscaping intensifying the overall composition. The imaginary axis is going through the middle from the Spanish Chapel that is intensified with an artefact referring to the Christian tradition.

The crematorium concept is built on two ideas – community and hope. Using architectural space, the community can be expressed with a circle; however, it is possible to point out to hope only. Unlike architecturally portrayed environment which is governed more by feelings and functional operation, the idea of hope is a matter of the perception by the individual and the own understanding. The design is focused on the axis resulting from the composition of the Spanish Chapel nearby, to which a catafalque is turned and to which the cremation operation is directed. The direction is supported with a retreating structure with an inspection opening aimed at the chapel tower and it is intensified with a symbolic artefact in the urn grove. The main circle hall on the ground floor is intended for closed family members and the bereaved, and the gallery on the first floor is designed for other visitors where they become a part of the community giving the support for mourning people. The disposition is solved to a certain extent as variable so that it enables, according to the bereaved' requirements, to accompany the deceased to cremation.



Fig. 8: Visualisation of the grounds of the newly designed urn grove with the crematorium building and the related columbarium. [3]

The space is aimed not only at the deceased but mainly at mourning people entering through the main entrance directly to the hall and having main areas restricted on the first floor, relating directly to technological equipment and the way of the deceased that should be as short as possible, and handling would enable a sufficiently reverential attitude to the ceremony. Thus, the technological background should not only be the mere functional operation but it should be considered as a part of the whole ceremony of the last farewell of the bereaved's people and the deceased's last way whose ways can intersect not only in the ceremonial hall but already when the deceased is displayed before the ceremony, and further on the way to cremation. Thus, it will enable accompanying the deceased for a longer time as it was custom during traditional Christian funeral ceremonies, and thus devote time to the dead person who deserves it at the end of his or her life. Time plays the crucial role in the rhythm of the individual ceremonies and it depends on time how well the space is used.

3.3 Prague

In this academic year of 2016/2017, students in cooperation with their university teachers, according to the assignment from Mgr. Martin Červený, Director of the Prague Cemeteries, deal with land consolidation of parts of the Olšany Cemeteries in Prague. They have been developed gradually since the 17th century by attaching new parts, until the beginning of the 20th century. During the last 100 years, their condition seems to be nearly unchanged. [2] Their completion by Rondocubistic columbaria and meadow grounds for scattering does not comply with the current burial trends. The common skeleton graves, mainly in the oldest parts of cemeteries, start to be deserted by their lessees, as well as chapel graves; on the other hand, the place is being liven up by funeral tourism and it also used as a municipal park for the surrounding densely built-up area. Students have selected localities suitable for further possible development of the place.



Fig. 9: Visualisation of the design of crematorium – interior, Nový Jičín [3]

One from the designs deals with abolishment of the existing columbaria squeezed in a busy part near the New ceremonial hall (near the Upper entrance from Vinohradská Avenue, near Želivského Street), subsequently replacing them in the cemetery grounds. The student Lukáš Dubovský considers the current position of columbaria to be inadequate and disrespectful. Today, columbaria are a part of fencing separating the cemetery from the space of the surrounding streets.

This situating was maybe meant as a symbolic border that is to be made up by the deceased, the border between our and their worlds; nevertheless, finally they can evoke even unpleasant feelings.

Therefore, as part of designing new columbaria, the current urbanism of the cemetery was used and their placement was centralized inside. Thereby, dignity for the deceased has been achieved. In the middle, there is a cross of the Roman Catholic Church, today overgrown with greenery. The place giving a non-maintained impression, however, has its potential, and thus it is a suitable locality for placing a new columbarium.

When searching for a form suitable for a new columbarium, it seemed to be unsuitable to derive from or be inspired by the abolished form that can evoke the feeling of the gathering place for urns or the block of flats as the final resting place. The new form should be simultaneously a representative of individualism and collectivism, and thus a symbol of the fact that every single person is exceptional and at the same time he or she is a part of the community in the world.

The design is based on the symbol of the Roman Catholic Church, i.e. the cross. With its vertical, it symbolizes interconnection of the earthly and divine worlds. It is also a symbol of suffering, pain but also sacrifice, devotion or community. Other symbolism has been searched in what death represents for us. The consequence of death is usually sadness of the bereaved, and it is characteristically accompanied by crying – tears. Similar symbolism can also be found in rain drops...it is said sometimes that sky is crying over them.

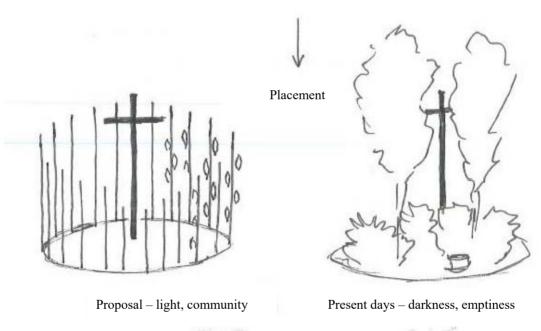


Fig. 10: Design of the columbarium in the central part of the Olšany Cemeteries (Source: Lukáš Dubovský)

When deriving from these aspects, vertical subtle structures were placed around the central cross to which the individual cases are attached. One vertical can also represent one family, as it was usual in family tombs, and the symbolism of the family tree would manifest itself. The individual cases would be illuminated from below, whereby light would be taken into the dark part of the cemetery, roads would find their destination, and souls of our close persons would become that guiding small light, hope for lost persons.

For the solution, the diploma thesis student Šárka Nahodilová has selected the locality of the oldest northern part of the Olšany Cemeteries in Prague where coffin graves are only situated that nobody can visit today and that fall into disrepair or have been removed. As a consequence, the free

space was created here she uses for new forms of burial and situates here towers for placement of urns with ashes. The concept is influenced by basics of proxemics dealing with non-verbal communication consisting in expressing the relation between people by means of distance. It divides the area into four zones. The intimate zone up to 60 cm, the personal one from 60 cm to 120 cm, the social one from 120 cm to 360 cm, and the public one of more than 360 cm. Due to the feeling of lost intimacy of the place near the columbarium walls, she divides the solved unit into "urn towers" placed in free places among the existing graves.

According to the principles ensuring the intimate space, she designs a network where the individual towers are situated so that the intimate zone is not disturbed by any road or the current grave or the neighbouring tower. On the contrary, the personal zones are touching each other, and the social zone is created in the remaining space. Tops of the individual towers will be equipped with light that will be switched on according to a certain algorithm. The appearance of the towers is based on cubism that is present in cemeteries in the form of cubistic columbaria near the Upper entrance.

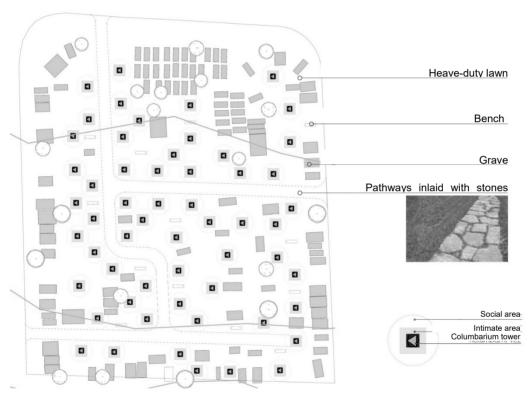


Fig. 11: Placement of columbarium towers according to the proxemics theory (Source: Šárka Nahodilová, edit authors)

4 CONCLUSIONS

Student papers react to new burial methods which appeared in Czechoslovakia after it gained its independence in 1918 and which have been flowing to our republic from abroad until today; recently they are natural funerals from England. What they have in common is cremation which has brought the hygienic burial method, and therefore also more variable possibilities of providing the final resting place. In the Czech Republic, this burial method has increased up to 75% out of the total number of funerals over nearly 100 years (in Prague up to 98%), whereby we have occupied the first place among the European countries. Original cemeteries also have to adapt to this which were designed for interment, or the condition is the construction of completely new burial grounds. Thus

the students offer in their papers possibilities both for constructing new grounds and transforming the existing ones.

They are searching for possibilities not only by selecting localities but also with their approach to columbarium buildings or funeral halls in order to react to the current requirements mainly of the bereaved at whom funeral architecture is oriented (unlike ancient burial grounds where this architecture was oriented at the deceased). The designs show how it is possible to react, thanks to landscape and architectural creation, to these social changes and partially suppress or point out to some negative aspects concerning funeral services in the Czech Republic.

Student's work has resulted in a wide variety of approaches to funerary architecture. There is such a clear contrast between the concept of interconnection of the nature of the forest cemetery in Velichovky against the reconstructed cemetery space in Nový Jičín with an emphasis on the geometric order centered on the Spanish Chapel - the Symbol of Christian culture. It is very important in what environment we are born, in what environment we grow up, and even more important in what environment we pass away. As we are creating cultural legacy for the next generations. And all this is largely influenced by architecture around us, the public urban space and natural countryside.

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