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Brief history of crematoria and mourning halls.
Modern cremation history

Introduction

Crematoria and mourning halls were part of architecture in cities for many decades in some European countries. This work focused on their evolution within a relatively short time, from 1876. The creation of these buildings is closely related to religion and laws in each country, so many aspects had to be considered before their realisation. The work was focused on Europe but it also deals with some world countries, which developed this kind of buildings as well. Crematoriums and mourning halls were often the last space where family or the bereaved spent time with the dead, hence to make this space satisfactorily convenient and beautiful, a discussion of its historical background and further direction is needed. These buildings for mainly secular funerals were often compared to religious funerals in churches. The main question was whether a mourning hall could replace the sacral space of the church and bring the same ritual moment during funeral. The paper considered big political, historical and religious forces which created these buildings for modern cremation that have nothing to do with an old cremation ritual of antic nations any more.

State of the research

The research methods were theoretical with using literature and study of floorplans of crematoriums and mourning halls. Basically, the work focused on clarifying the process of the establishment of the first crematoria and their architectural styles, which was the topic of many debates in the past.

Funerary halls were established along with the first crematoria. In the event of cremation, the funerary hall replaced the space for the ritual which took place in a church prior to a burial. Thus, a secular ceremony took place in the funerary hall as another option for a church funeral. At first, funerary halls were part of a crematorium, and it was only later that they were distanced, sometimes forming a separate building. To understand the meaning and operation of a funerary hall, it is essential to begin with the first crematoria. The ancient temple, the single-nave basilica and the central sacral buildings were the inspiration for architects to design the first European crematoria. In 1874, a law was passed in Italy that was the first in the Christian world to allow the dead to be cremated. Two years later, in 1876, the first European crematorium was built in Milan in Italy (Fig. 1). The first cremation here using cremation furnaces took place on the 22nd of January 1876. The complexities of social changes that preceded the construction of the first crematorium were described in the Encyclopedia of Cremation [1]. In the end, however, it was the efforts of one man, Albert Keller, who invested into cremation machine research to be the first person to be cremated in a modern manner. This is documented by the inscription above the entrance “Tempio Crematorio per volontà del nobile Alberto Keller, eretto e donato alla città di Milano” [Cremation Temple by the will of noble Albert Keller, built and donated to the city of Milan].

The author of the neo-Greek project of the Milan temple was architect Carlo Maciachini. The core of the building was not the funerary hall, but the crematorium. The crematorium was extended with a waiting room on the right and a funeral parlour on the left. The ceremonial hall

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here instead had an open columnar space reminiscent of the peristyle of ancient Greek temples. Here, the mourners together with the bereaved relatives personally watched the ritual of cremation of the coffin with the remains of the deceased. However, this spatial design of the crematorium did not meet with a favourable reception from the public. Cremation was not accepted by people in general, because at that time, the church still considered inhumation the only suitable method.

The Doric colonnade, distyle temple-front, urns and blazing flames of the crematorium carried meanings that conveyed a sense of timelessness, permanence and immortality, and perhaps a reference to cremation as an antient funerary rite [2, p. 135]. Neoclassical designs of Italian crematoria in monumental cemeteries continued in the cities of Turin, Pisa, Florence and Siena, and Egyptian designs were no exception, such as the stepped pyramid roof of the crematorium in Rome’s Verano Cemetery.

Historicism and camouflage were generally intended to promote cremation, and to encourage its adoption, rather than to underline its origins within radical politics and progressive social circles. Efforts to mask furnaces and chimneys indicated an awareness of cultural and emotional sensitivities [2, p. 137].

The late 19th century in Italy also gave rise to works that were evidently innovative. For example, the crematorium in Lodi, the second crematorium in Italy built in 1977, where the author of the design, Professor Paolo Gorini, looking for the cheapest way of cremation and talking about cremation as an ancient method of burial, placed the chimney just behind the classicist entrance, thus emphasizing it. Crematoria were located in monumental memorial cemeteries (in Italian Cimitero Monumentale), which were characterised by a regular network of alleys, and the crematorium formed a part of the cemetery. In the same year as the first European crematorium, a crematorium was built in the United States. It was built by Francis Julius LeMoyne on his own land, in a location known as Gallow’s Hill. It was a simple house with a gabled roof, without any classicist treatment. Its utilitarian function was also described by Dr. LeMoyne, who performed cremations to prevent the contamination of drinking water.

The designers of other European crematoria then went on to select the concept of separating the funerary hall from the technical section. An example of this is the first German crematorium, which opened in 1878 in the Thuringian city of Gotha (Fig. 2). This classicist crematorium and funerary hall (in German Die Trauerhalle) was designed by architect Julius Bertuch and engineer Carl Heinrich Stier. The funerary hall at that time offered a similar mourning ritual to that currently practised. The coffin with the deceased was placed on a catafalque and passed to the basement at the conclusion of the ceremony. The coffin and remains of the deceased passed to the gas cremation furnace on rails. The cremation took a little over an hour. The urn with the ashes then passed up via an elevator to the level of the funerary hall and was thus available almost instantly. The funerary hall underwent refurbishment, which did not preserve its original form. The new funeral halls were erected in communal cemeteries, hence were not always constructed as exclusively secular spaces: the building at the Markkleeberg cemetery was labelled “morgue, ceremonial hall (“cemetery chapel”)” and the plans for Holzhausen included a preparation room for the “funeral orator/minister”. Especially in villages where cemeteries were near the church or where there was a cemetery chapel, secular (non-religious) funerals did not always have a separate room. In the 1960s, there were moments when the whole secular funeral ceremony, including the funeral speech, had to take place outside, in the cemetery [3, p. 151]. In the following years, other crematoria were opened in the German cities of Heidelberg (1891), Hamburg (1896) and Offenbach am Main (1899).
In England, the first crematorium was established in Woking after 1878, designed by Italian architect, Paolo Gorini, in the neo-Gothic style (Fig. 3). Here, in 1885, cremation officially took place for the first time.

Other crematoria followed in Manchester (1892), Glasgow (1895), Liverpool (1896) and Darlington (1901), but the most significant was the opening of the first municipal crematorium in Kingston-upon-Hull (1901). It was not until the following year, in 1902, after the construction of the six above buildings, that the Parliament passed a law To govern the burial of human remains and to allow funeral authorities to establish crematoria [4]. It is important to realise that this law at the time affected not only Britain itself (then the British Empire) but also its colonies outside Europe: in Asia it was India, Hong Kong, Malaysia and Iraq, in Africa it was Egypt, Sudan and others, and its main dominions at that time were Canada, Australia and New Zealand. The construction of the crematorium in Golders Green in London began under the auspices of Sir Henry Thompson, president of the Cremation Society, just as the law came out and became the focus of attention of cremation advocates. It was designed by Sir Ernest George and Alfred Bowman Yeates, one of the leading late Victorian architectural partnerships [4]. The building has two chapels, an arcaded gallery, a columbarium, and so on. The impression it created is rather reminiscent of a church monastery than a secular building of a crematorium. The interior of the western chapel is designed with a choir and an organ above the entrance, continues with one nave illuminated by a side light and finishes with a raised podium. At the end of the podium is an altar with a Christian cross. A window is placed axially above it and asymmetrically. Perpendicular to the side wall of the nave is a catafalque, and the coffin may pass from it through a door into the actual crematorium. Thus, the religious motif of the chapel is strongly dominant, with the altar at the centre and the coffin by the side. On the other hand, in terms of the design, it also had operational reasons for
achieving the shortest path from the hall to the technological section. In the second Eastern Chapel, the catafalque is located axially at the end of the nave, i.e. in the centre, the usual site of a Christian altar.

Ten years after the first crematorium had been built in Germany, the first French crematorium with the Salle de la coupole (1889) funeral hall was established in the Père-Lachaise cemetery in France. The crematorium was designed by architect Jean-Camille Fromigé for the eastern part of the cemetery near one of the gates. It must be said, however, that the idea of modern-day cremation had been present in French society long before this crematorium was built, even earlier than in other countries. In 1885, the Italian doctor Pini wrote: “It was in France where fame was restored, before all other nations, where the honours of cremation were renewed” [5, p. 63]. In 1765, a decree was issued in Paris banning burial of the dead in the church and inside the city (in the then urbanised part of the city), preceded by calls on the dangers of inhumation by Dr. Haugenot of Montpellier. “Since the triumph of Christianity, the first cremation in Europe took place in this French city in 1794, of doctor Bouvais de Preau, a conventional mountain doctor who died in the service of his homeland. A non-religious funeral was held in Montpellier, with one exception to a usual funeral, that being the presence of a pyre. The cremation lasted several hours and a part of the night” [5, p. 64]. Another solitary case of cremation, almost a hundred years before the opening of the first crematorium, took place in 1797, at the request of General Marceau.

In addition to the need to adapt to the police and hygiene legislation, the lack of wood was a problem for the further development of cremation. In 1796, Cambray submitted a project to the Central Administration for the Department of Siena recommending “not to use wood, which has become so scarce” and calling on scientists to invent “a furnace engineered to utilise modern chemistry”. In the 2nd half of the 19th century, the question of which cremation furnace to use was the centre of attention. European industry was in competition: talented Italian investors with Germans, while the French rather remained as spectators [5, p. 66]. After a tour of the Italian furnaces from Gorini and Poma-Venini and the German Siemens furnaces, according to Pierre Santa and Max de Nansouta in 1881, the German equipment was the most perfect. At first, Gorini’s furnace had been installed in the Père-Lachaise cemetery, later replaced with a Siemens furnace. Meanwhile, cremation had become modern thanks to Honoré de Balzac; in his work Ferragus (written in 1833), he applied for permission to cremate his dead fiancée. Although France initiated the renewal of the cremation ritual, and in a manner, had ideas ahead of the times, we still encountered a certain disregard for this type of funeral in literature at the end of the 20th century. As noted by Louis Pasteur: specialists in the history of death are content with a paragraph or a page, Phillipe Aries in Man Before Death (1985) did not dedicate more than a few lines to this subject, Louis-Vincent Thomas in Death and Power (1978) did not address cremation at all, and if so, only very marginally. Only Jacqueline Laloutte described some of the ceremonies accompanying cremation at the turn of the century in France [5]. Similarly, cremation was not favoured by the press, Davies noted that when John Edwards, President of the Consultative Assembly for the European Council, died, the event received large coverage in the French press, but the fact that he was cremated was not even mentioned [6]. It was not until the Catholic Church changed its attitude to cremation, which it authorised in 1963, that the situation slowly began to change. The Vatican cited the urban aspect as the reason to allow cremation: to preserve the land for the living. François Truffaut’s film of 1961, Jules and Jim, is the first to show the process of the cremation ceremony to the public, when Jules’ two friends died: family participation in the funerary hall, placement of the casket into the furnace, then placement of the ashes into the urn and its storage in the columbarium [5]. From among the new
type of architecture of funerary halls, the building in Père-Lachaise looks most of all like what might be called a secular space. Under the massive dome is an area for the bereaved, and at its end is an arched apse with lights that resemble torches at the sides, neoclassical columns and a massive staircase that protrudes from the seating area high and deep into the apse. It could be said that the staircase represents the pyre where the body will be incinerated, as indicated by the dark blue interior of the apse, resembling the sky.

States such as Italy, Germany and France are presented here separately, but they were well informed about the cremation movement, the production of new cremation machines, new crematoria and funerary halls. This took place during international medical congresses and exhibitions, where at first only new ideas and then devices were presented. An exhibition was held in Vienna in 1873, where Professor Brunetti presented his improved machine. One of the most important events in Florence in 1869 was the International Congress of Medical Science, the main topic being the replacement of traditional burial by other methods for reasons of hygiene, the replacement of inhumation with cremation. A year after the congress in Florence, Prince Rajah Maharaja of India, who was staying there, died and was cremated on a pyre, which took almost seven hours, after which the ashes were dispersed into the air. This act provoked much discussion in Italy and many other cases of important people wanting to be cremated after death. It stimulated the development of the first modern cremation facilities [6]. The Vienna Exhibition in 1873 introduced Brunetti’s new furnace apparatus to all the influential figures in Europe. Later, other types were invented by Gorini, Venini in Italy and Siemens in Germany.

However, the cremation movement was far from being just a European affair. In the same year as the first European crematorium was opened in Milan, the crematorium in the United States, near Washington (1876), independently also began to operate. Both events were related to the introduction of new health laws. However, the world had been connected to European countries through large colonies, which at the time belonged to Spain, Portugal and the Netherlands, but also Italy, Great Britain, France and Germany. It is therefore not surprising that a modern crematorium was established in Hong Kong, a former British colony, as early as in 1899. Especially in Asian countries, Buddhism had been a great influence in the past. The burning of the deceased in a funeral pyre was a Buddhist tradition, of course known also in the Middle Ages, when cremation was banned under pain of death in much of Europe by Charlemagne. Later, the Chinese rulers of the Ming Dynasty (14th to 17th centuries) rejected cremation, and Confucius’ philosophy viewed cremation as an act of cruelty [6]. Concerning medieval Buddhist influence, however, this referred to the ritual of burning, not today’s technical method assisted with furnace technology.

Buddhism has also significantly influenced Japan, where cremations currently account for almost 100% of all funerals, holding the world primacy [7]. It is the strong tradition, more than the faith, that maintains this cremation culture [8]. According to Hashizume Shinya, most of the city’s inhabitants did not have cemetery plots until the end of the fifteenth or early sixteenth century. Temple cemeteries largely developed after the Onin War (1466–1477), when Buddhist care for the dead became more widespread. While previously ordinary citizens had wanted to build communal monuments since the seventeenth century; monuments dedicated to individuals or couples began to appear. With the temple registration system (terauke seido) from the year 1640, the relationship between temples and ordinary citizens was consolidated in the “parish” system (danka seido), which required all Japanese families to register in local temples. Although this policy was pursued to thwart the perceived threat of Christianity, it soon transformed temples and priests into state authorities, giving them undue control over the lives of their parishioners to register them as non-Christians. Parishioners also had to attend the Temple of Death throughout the year and accompany the ancestral rites, also Bon, the equinoxes and the anniversary of Buddha’s death [9, p. 90]. He further states that it was almost impossible to move to another temple, and to hold memorial or funeral services elsewhere was strictly forbidden. In 1871, registration in a temple was officially cancelled, but the connection between Japanese families and local temples was now firmly established. Despite attempts by the state to promote Shinto funerals as part of a larger pro-Shinto movement (which does not opt for cremation but inhumation), the public was not easily persuaded. “This was most clearly indicated by the ban on cremation in 1873 in an attempt to support Shinto burials. The ban lasted only two years” [9, p. 95]. Ten years later, the government decided that anyone who died of a contagious disease must be cremated and promoted cremation as a form of purification. Mori Kenji points out that incorporation of the “habit of succession” ensures an ideal housekeeping system, which has survived since the registration of families in temples and is also strongly rooted in current law (Clause 897 – Inheritance of Ritual/Religious Benefits). However, this resulted in the inability of those without offspring to purchase a burial place and the difficulty in handing over graves within families that only had daughters. When a grave is bought in Japan, what actually is the subject of the transaction, is the right to use the land for eternity, and the system presupposes the concept of a continuous, direct origin, a family existing in one place, which is still enshrined in civil law to this day. The Meiji Civil Code defines a grave as the central site of family ritual. The ritual involves several stages, i.e. cremation remains are placed in an urn and buried in the family tomb 49 days after death, when the traditional Buddhist mourning period ends. The individual memorial service provides for the 33rd, 50th and even 100th anniversary of death.

Although the greatest efforts to promote cremation and the establishment of various associations took place in the 19th century in Europe and around the world, the first international organisation was established as recently as in the 20th century. The example of a separated mourning hall from this time was in Westhausen, Germany (Fig. 5). In 1936, delegates from Great Britain, Denmark, France, the Netherlands, Yugoslavia, Germany, Austria, Romania,
Sweden, Switzerland and Czechoslovakia met in Prague and agreed on a “New Congress” to be held in London with the objective of establishing the International Cremation Federation. The commission, which was put together to plan the event, was composed of President F. Mencl from Czechoslovakia and Vice Presidents Prof. Dr. H. Zeiss from Germany and M. Henri Ferre from France. A year later, the objective was achieved, and the federation met at a congress in London [1].

Some countries built their first crematoriums only after the recognition of cremation by the Roman Catholic Church in 1963 [10], which is what occurred in Hungary (1967) and Slovakia (1968). Other countries influenced by the events of World War II rejected cremation since many people died in this way during the Holocaust. The question of a crematorium was reopened only much later, and in Ukraine, as late as in the sixties. The first crematorium was built in 1975 by architect Abraham Miletský; the sculptural brutalist building with huge entrances and a mysterious hall is now a tourist destination (Fig. 6). It represents quality architecture associated with its function; the hall closes in on itself, the mysterious light resembles a cave through which one enters another world. Poland had considered cremation before the world wars, but after the war events, it waited a long time to reopen the topic, moreover because it was a strongly religious Catholic

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Fig. 5. Separate funerary halls (without the technical part of the crematorium) were built near cemeteries and possessed a high architectural standard, such as the funerary hall at the cemetery of Westhausen, Frankfurt, Germany, built in 1918 in accordance with the plans of artist Otto Herbert Hajek. It is one of the few surviving brutalist buildings. The construction represents a large span of beams. The folds of the roof are also held up by the concrete structure, and sculptural accessories are used only for details (drawing by I. Dlábiková)

Il. 5. Oddzielne sale pogrzebowe (bez części technicznej krematorium) powstały przy cmentarzach i miały wysoki standard architektoniczny, jak np. sala pogrzebowa na cmentarzu w Westhausen we Frankfurcie, Niemcy, zbudowana w 1918 r. według planów artysty Otto Herberty Haja. Betonowa konstrukcja podtrzymuje również falde dachu, a rzeźbiarskie dodatki służą tylko do detali (rys. I. Dlábiková)

Fig. 6. Sculptural crematorium by Abraham Miletsky, brutalism, 1975, Ukraine, Kiev (drawing by I. Dlábiková)

Il. 6. Krematorium rzeźbiarskie Abrahama Mileckiego, brutalizm, 1975, Ukraina, Kijów (rys. I. Dlábiková)
country. It opened its first crematorium as late as in 1993. The situation has changed radically since then, and in 2017, 54 crematoria were operating, of which only eight were municipal, the others being private enterprises. Greece is the only country in the European Union where cremation was still banned by law as late as 2005, and the idea was discussed for its practical reasons. In the Greek Orthodox Church, burials are experienced through strong rituals and faith. Since the fourth century, the traditional and only manner of dealing with the bodies of the deceased in Greece has been inhumation, followed by numerous rituals well-regulated in space and time, symbolically expressing the communication between the living and the dead (after: [1, p. 224]). It was not until 2019 that the first crematorium was established in Ritsona in Greece, about 50 miles from Athens. The timeline of the first crematoriums in European and world countries was illustrated in Table 1.

### Conclusions

The complicated situation which formed crematoriums and mourning halls was transformed into architecture with various styles and symbolism. Even though it continued in the old tradition of cremation, the architecture of these relatively new type of buildings is still not established. In the first buildings architects tried to hide big chimneys, which are an inevitable part of these cremation machines. Later the chimneys were exposed and created an important part of architecture. The first crematoriums in Italy and in the USA did not contain a mourning hall. In the case of the first Italian building, there was only a space where the coffin went into the furnaces and the bereaved could look at it. Later the mourning halls were necessary in every crematorium and started to be built separately in Europe. At the end of 20th century, the trend towards observing cremation got back into crematoria and side by side with mourning halls, small spaces before furnaces behind the glass wall were created to enable the bereaved to see the cremation in some cases. Some European countries had their first crematoria buildings only at the beginning of

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21st century and almost every architect created their own language to express these public buildings. And each country in Europe had its own rules and opinions on cremation itself [11]. Due to these reasons, the architecture of crematoriums and mourning halls is still developing, and this work described only the beginnings of their origins and in the future many changes in these structures could be expected.

Summary

The work presented the development of relatively new architecture of crematoriums and mourning halls. The main question is whether this kind of buildings could be a dignified alternative to religious funerals in the church, which also depends on the quality of this new space. The churches were developing for centuries in Europe. From a relatively short history of crematoriums and mourning halls, it is clear that it had a lot of appearances. From the theoretical background, it could be concluded that this architecture is still developing, and it could be expected that it will be articulated much better in the future.

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References


Abstract

Brief history of crematoria and mourning halls. Modern cremation history

Cremation was a common way of burying in old cultures, for example in Ancient Greece, Celts, Ancient Rome, Vikings and many other cultures around the world. In Europe burial practices changed since the Christian culture ruled the society, because it did not support this kind of burials and later Charles the Great prohibited the cremation under pain of death. This ban lasted in Europe almost thousand years. The church started to tolerate the cremation as a way of burying only in 1963. In spite of the church’s opinion, the societies built the first crematoriums in Europe from 1874. But these buildings for cremation have nothing to do with the old cremation rituals when the body was burnt down on a big amount of wood which lasted several hours. The main part of new buildings are furnaces and chimneys where the body is burnt after around one hour. This old – new way of burying brought a new type of buildings and the discussion as to the style and symbolism of this architecture was huge. In the crematorium building a new type of space emerged, namely a mourning hall. Later this space was separated from a crematorium and created an independent unit. Mourning halls are now a common type of architecture in Europe and exist side by side with churches, where the religious funerals are generally held. In other parts of the world the old types of ritual cremation with wood are preserved until today, however, the modern cremation became more suitable in these countries as well.

The aim of the article was to clearly describe circumstances in which the spaces for modern cremation were built. The main method was studying styles of the first crematorium buildings and literature for this topic. These structures would never have been built without an effort of few personalities, who, despite the general Christian opinion, succeeded in establishing the first crematoriums.

Key words: crematorium, modern cremation, architecture, mourning hall, history, burying, furnaces, ash
Słowa kluczowe: krematorium, nowoczesna kremacja, architektura, sala żałobna, historia, grzebanie, piece, popiół