SACRED | DEATH | ARCHITECTURE

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### $SACRED \mid DEATH \mid ARCHITECTURE$

SPACES AND ATMOSPHERES IN FUNERARY DESIGN

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Project Committee
Prof. Christophe van Gerrewey
Prof. Martin Fröhlich
Arch. Sophie Shiraishi
Fr. Steve Gilhooley

<u>Author</u> Tomasz Marcin Saracen

École Polytechnique Fédérale de Lausanne



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#### Table of contents

| 1. | Foreword |
|----|----------|
|    |          |

#### 2. Introduction

People and memory, life and death

### 3. The sacred and the profane

- 3.1 | Existential necessity of the sacred
- 3.2 | Ineffable space
- 3.3 | The sacred today

### 4. Past and present

- 4.1 | Death and society
  - a | Religions and mortuary rituals
  - b | Towards cremation
  - c | Christians, symbols, mentality

#### 4.2 | Death and architecture

- a | Cemetery
- b | Chapel
- c | Mausoleum, columbarium, memorials

- 4.3 | Crematorium as a total building
  - a | Parts and functions
  - b | Promenade
  - c | Context
  - d | Structure and material

#### 5. Moment to come

- 5.1 | Alternative ceremony, swiss situation
- 5.2 | New possibilities

#### 6. Conclusion

Encounters at the End of the Time

# 7. Bibliography

### 1 | Foreword

To consider architecture as an inspired and a total discipline has always been of a great interest to me. From this point of view the work of an architect influences all the elements in a whole. All the pieces rely on architectural mastermind and at the same time they compose it. This effort is put in the center of a complex relationship with history, art, sociology, engineering and craftsmanship.

The issue related to the sacred, religious spaces and architecture is a difficult and challenging field for designers. It is for me particularly inspiring and in some way it brings together the essential questions that I would like to pose to myself. When those questions begin to reappear in today's discussion, I see it as an opportunity to confront myself with the aspects of the sacred and the profane - death and architecture.

I wish to devote the final work of my studies to the points of personal interest gathered through the years of architectural education. With this paper, I have the ambition to clarify my understanding of the subjects connected to religious buildings, and funerary design in particular. The goal is to determine my position as an architect towards the final path of man and understand how the architectural means can help in finding the sacred.

Moreover, this analysis will later try to set the principles and foundations to define new possible solutions that announce the design to come. A closer look into theories about the sacred and their practical applications, serve as a starting point to investigate the contemporary solutions and relations. The scope of my work is a small part out of the larger problematic linked to the anthropology, theology, philosophy and architecture. Not being able to cover multiple trajectories linked to the subject, this research seeks for the balance between the theory and its actual use in real examples. In order to find the architectural answer to the problem of death, funeral and cremation in today's society, my study explores the issues that cross cultures, religions, burial traditions and funerary typologies.

### 2 | Introduction

#### People and memory, life and death

The subject of the sacred remains an important aspect of the architectural practice and it recently gains an increasing recognition in society. Despite the progressive secularization, religion persists as a powerful way of defining the communities. Inseparably, a cultural legacy of any ethnic group is reflected by its collective memory and a respect to the deceased.

With a shift of meaning, religion gets transformed and becomes a more personal definition of an individual search for identity. Its role is still undeniably influential in a social and political life. Although the religious conviction diminished in the western culture, it keeps the position gained throughout the history. It still takes an important part of XXI century human life in economically developed and culturally varied countries. [1]

Nowadays, in almost every section of our lives we can observe a theater-like scenes of regular, common activities. People of today try to act, to wear a mask and hide behind someone else's thoughts, convictions or false correctness. Frankly, we are slowly evacuating the honesty of being with more and more subjects becoming the uncomfortable taboos. This is what happened to death. It is no longer visible, not wanted to be seen in life and in modern city. The presence of dying has changed, just like the society that changed and left behind some practices, once normal or natural.

Cemetery once had a completely different importance and a certain image. In the medieval city with its central position, the cult of the dead also had a more meaningful and symbolic value. From the XIX century when cemeteries were moved out from the centers, they began to live their own rhythm out on the periphery. With the urban development and densification, the fields of graves naturally became the islands in the ocean of built tissue. The Calvary Cemetery in Queens, New York creates a separate, unique necro-metropolitan skyline (See F  $\mid$  2). Those new city-states, states with no governance are sometimes hidden, sometimes missed, but certainly not very accessible or really wanted. In today's world, I have the feeling that we live as if we were never supposed to die.

The culture of death essentially changed. We no longer experience it directly at home like our predecessors used to, we barely see death. It is natural today to die in a hospital or a nursing facility, usually alone by choice or necessity. Almost literally enclosed behind "hermetic" walls of cemeteries, we got scared. At the same time, this fear provokes a certain kind of fascination and a great, open field of opportunities for architects.

<sup>1</sup> CAVARRA, Britton, Karla, "Constructing the ineffable. Contemporary sacred architecture", Yale School of Architecture, New Haven, 2010, p.9

The contemporary, unpersonalized and close to abstract vision of death needs to find an alternative. If there is a better way to understand dying, I would like to believe that architecture could help with it.<sup>[1]</sup>

However, are the sacred spaces always associated with the human presence? Or are they necessarily linked to nature? The analysis conducted in this paper considers different views on the sacred and tries to relate them to the contemporary situation. As most world religions assert that the world is made in the image of the divine, this would mean that the sacred space could be found anywhere, even without the human intervention. What then could make us feel this divine presence in a particular space? Focusing on a theory and practical examples, this work is aimed to find some key elements that could help with finding the answer.

In the following parts, the paper will base on existing funeral typologies to further get a deeper look into the architecture of crematoria. The goal is to define elements that are still missing or neglected. These very special buildings are very much affected by the concern of today's Western society. The particular example of a building "in between the sacred and profane" is defined by a variety of different factors. In the world dominated by the cult of burial, cremation slowly gets its place in funeral practices and gets more and more popular. If the society and its attitude change, the architecture needs to respond to that.

Currently, we live in the time of change. European funeral traditions based on the Christianity did not include cremation until the beginning of XX century. The increase of its popularity leads to a growing wide-range acceptance, also seen within the Catholic Church that resisted for long time. From a total banishment, through acceptance, incineration will probably be a most common practice in the years to come, also within the group of Christian believers<sup>[2]</sup>.

The objective of this study is to find an architectural position towards death, within the specific context of contemporary city. There are still open opportunities in the funeral design, where specifically crematoria are associated with almost only highly functional, pragmatic buildings. The further aim of this work would be to rethink the typology with allowing it to regain the spiritual quality and possibly to reintroduce ceremony as an essential aspect.

<sup>1</sup> ENG, Karen, "Design for dying: A TED Fellow thinks deeply about the architecture of death" URL: http://blog.ted.com/the-architecture-of-death-ted-fellow-alison-killing-rethinks-designfor-the-dying/ [11.11.2016]

<sup>2</sup> CORNET, de Simone, Geneviève, "Eglise: de la condamnation à la tolérance", Echo Magazine URL:http://www.echomagazine.ch/archives/articles-2014/19-a-la-une/679-cremation [30.10.2016]



# 3 | The sacred and the profane

### 3.1 | Existential necessity of the sacred

The foundations of most religious practices have an origin in the idea of the sacred, which could be expressed as the energy found in people and things. As a very complex phenomenon, can it be described alone or does it always need to be compared and related to results it produces? Already in 1957, when Romanian writer and theoretician, Mircea Eliade wrote and published The Sacred and the Profane. The nature of religion, he stated that we as humans have less and less ability to incorporate the sacred in our lives.[1] However, how to incorporate something in life, when it is not entirely clear how it can be defined?

What we normally do, consciously or not, we make evident distinctions. All spaces that we inhabit start to compose a hierarchy. This idea raises the rank of some particular spaces that are able to communicate with users, inspire or produce human emotions. Referring to the much older concept of Rudolf Otto describing "the holy as a numinous" [2], it also reflects and follows through of Eliade's theoretical work. The feeling of sublime is brought then by a balance between fear and beauty. They are architecturally interpreted as for example an uniformization and monotone, lack of edges, ends, the archetypal play of light, dark and emptiness.

According to the Romanian philosopher and theologian, the sacred is based on the non-homogeneity of spaces and therefore it can be experienced by a religious man. Invoking the Bible, the essential thought is represented by Moses and the holy ground, the archetypal sacred space brought by the burning bush. [3] What is important is the differentiation between two spaces, the idea of Eliade shows that the holy is surrounded by the ordinary - the special place is different than its amorphous, astructural environment. The essential explanation of the author is based on the existential necessity of the sacred - "If the world is to be lived in, it must be founded and no world can come to birth in the chaos of the homogeneity and relativity of profane space". [4] In this duelist space, we experience the manifestation of sacred realities through hierophanies. This is probably why his concept is still after 60 years so influential and intriguing also for architects. If all natural elements like stones, trees, hills, lakes, or everyday objects, obviously including architectural pieces are able to communicate with the transcendental sphere, how then can we reach it more easily and understand?

By the first definition, the sacred is in opposition to the profane, and it manifests itself in the world, in contrary to the profane. As the sacred space is always founded, it has its cosmogonic value and a ritual orientation. For a religious man, this constitutes a center of the world, a foundation that comes to life within the mass of homogeneous and infinite universe.

<sup>1</sup> STEGERS, Rudolf, "Sacred buildings: a design manual", Birkhäuser, Basel, 2008, p.10

<sup>2</sup> CAVARRA, Britton, Karla, "Constructing the ineffable. Contemporary sacred architecture", Yale School of Architecture, New Haven, 2010, p.18

<sup>3</sup> Ibid., p.19

<sup>4</sup> ELIADE, Mircea, "The sacred and the profane, The nature of religion", Harcourt Brace Jovanovich, San Diego, 1987, p.22

Those holy places, separated from the rest can be seen through different architectural or urban images - for instance a church in the village, an altar in the church or a small icon corner in someone's house. They become breaks in space that sanctify the world for a religious man. The opposite attitude of a non-religious human is accompanied by his special moments, individual memories and "holy places" in his private world. Even if dissociated from religion, those personal connections become again the breaking points in the regularly perceived spacial extent.

In the theory of Eliade, the world needs to communicate with universe. It is the sacred element that helps it to establish the order. Just like the unknown, unoccupied territories get ritually possessed - the human world needs to be consecrated to get out from surrounding chaos, because "human beings cannot live in chaos" [2]. Any inhabited place gets consecrated by the simple act of construction. It is like repeating the cosmogony, like an archetypal pole, a pillar that creates an axis between heaven, earth and underworld. [3] This symbolism explains religious behaviours in the respect of the place that one lives in.

Other relevant issues raised by Eliade, refer to the center with its significant image and value. The center is always a beginning, everything starts from this first "axis mundi" and a prototypical division into four horizons. In many different cultures there is a repeating pattern of the same scheme, where "settling in a territory is equivalent to founding the world". This view creates an important meaning for every household, where our private, individual center becomes somehow the center of our world. A home is sanctified like a temple, because of the cosmogonic symbol, the act of creation. Valerio Olgiati describing his recently completed Villa Além in Portugal, claimed exactly this - that his living room is "a place where everything begins". Nevertheless, even if his buildings operate in not usual scale, material or almost majestic appearance - Olgiati points out that they are not temples, they are just buildings. Referring to the center has a recurrence too in the works of Raphael Zuber, who is one of Olgiati's younger generation successors. Both in the apartment building or in the funerary chapel, the idea circles around the order, elements and their relation to the very middle of a system. This center is considered only in an existential sense, not necessarily having a geometrical meaning.

What is also worth mentioning is a matter of time, as a factor that derives from the concept of not homogeneous composition of the world. In the continuity and monotony of time we usually observe different rythms, festive periods and extraordinary events. Here again, the religious man repeats a cosmogonic myth by putting himself into the sacred sphere.

<sup>1</sup> ELIADE, Mircea, "The sacred and the profane, The nature of religion", Harcourt Brace Jovanovich, San Diego, 1987, p.28

<sup>2</sup> Ibid., p.34

<sup>3</sup> Ibid., p.35

<sup>4</sup> Ibid., p.47

<sup>5</sup> OLGIATI, Valerio, "The Difficult Double: Valerio Olgiati / Iconographic Autobiography", Lausanne, 02.05.2016

Through the liturgy, a certain time from the past can be brought to the present - like for instance, different annual Christian structures and weekly or daily repetitive moments. By a particular celebration, a gathering, the presence of God's Kingdom, the eternal sacrifice can bring back the time from the beginning of Christianity. Everything depends on one's attitude, which can be either accepting the religious factors, or refusing God's presence. For homo religiosus, the sacred manifests itself and in the reality of this world there is a sacred transcendence. On the other hand, a homo non-religiosus, does not accept divinity and lives the relativity of reality where all depends on him and everything is possible. The sacred gets the form of other myths, rituals, adopted holidays that create a new "thing to do".

A religious man sees all nature as capable of revealing its cosmic sacrality. All the divine elements like Water, Terra Mater and Vegetation are impregnated with the sacredness. [1] Through the hierophanies, like Nautilius logarithmic spiral (See  $F \mid 5$ ) that is an almost direct representation of the "sacred universe", as the Whirpool Galaxy with its circling structure (See  $F \mid 3$ ). This relation of nature, cosmos, and human creation can produce some cosmogony and resemblance. The existence of man mirrors the universe, gods creation that wants to say something and unfolds in the world.

Architectural responses also try to represent the same emotion, like Philip Johnson's Thanksgiving Chapel (See F | 4). For Eliade, man needs to be open to the world to be in communion with gods and to sanctify the world and the nature. A natural setting for architectural project, a landscape that this project needs to respond to, have a direct impact on a design. While looking at the natural panorama, we experience something aesthetic, just like looking at the romantic paintings. This little melancholic feeling can give the sense of affiliation to something greater and bigger than we could understand. Paradigmatic images often occur in life of either religious or non-religious man. As learned from Eliade, concepts anchored in religion persist in profane behaviours of man, not always conscious of this heritage. Religious experience accompanies a man through his private, spiritual places and memories. When the connection between human body, house and cosmos is desacralized, there is no longer relationship with divine. A death of a man loses then its spiritual significance and like habitation of modern non-religious society, has no more cosmogonical value.

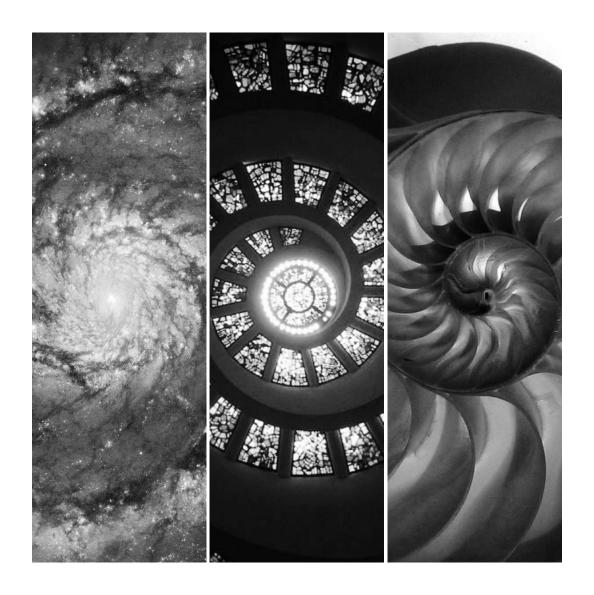
Nevertheless, if according to Eliade, the sacred can stay "in eclipse" in one's consciousness [3], it would be possible to reintegrate it and rediscover the traces of transcendence. Accordingly, if death is still a part of the cosmogony and the other dimension, then it becomes a significant transition from the profane to the beginning of a spiritual experience.

<sup>1</sup> ELIADE, Mircea, "The sacred and the profane, The nature of religion", Harcourt Brace Jovanovich, San Diego, 1987, p.116

<sup>2</sup> Ibid., p.164

<sup>3</sup> Ibid., p.213

#### F | 3 | 4 | 5



#### 3.2 | Ineffable Space

Is it possible to speak about the unspeakable? If something cannot be described by definition, it is up to the individual, subjective expression and experience. Le Corbusier tries to achieve it, as a not very religious person himself, with his idea of "l'espace indicible". The argument in his essay of the same title that he published in 1946, presented this important philosophical statement.

Le Corbusier argued that the need to control the space and the "aesthetic emotion" are fundamental. His research and explorations were aimed to reach the fourth dimension in architecture. Going beyond time and space as a need of looking for the spiritual aspect was for him the fundamental condition. Many of his works, are more or less directly built up on this theory and bring the sacred element, not only to religiously associated realizations.

The ineffable space coming from the modernist reflection influences architects until now. If by simple understanding, it cannot be literally described - it needs to be manifested by other means, by alternative forms of expression like music, art and architecture. The question of incomprehension of the ineffable needs to be challenged by one's vision. Therefore, this psychophysiology of perception<sup>[3]</sup> allows to see the object in the landscape, which produces certain emotions, the atmosphere is created by the resonances. All the forms that are capable of interacting with the surroundings are for Le Corbusier the means to bring the ineffable to life. Following this idea, he designed the Purist, geometrical, made out of concrete tombstone for Yvonne Gallis at Cap-Martin which later would be his own place of final rest <sup>[4]</sup>. What is crucial for the Swiss modernist and what crosses his creations, is the synthesis of all the elements that can express the totality of his concept.

The space of Le Corbusier can no longer be measured by criteria of Euclidean and Newtonian science, because it relies on the phenomenology of vision and the individual sensation. This theory somehow refers also to Einstein's theory of relativity - where there is an inseparable time-space entity. The best and well known example of espace indicible is the Notre Dame Chapel in Ronchamp (See  $F \mid 6$ ). Considered as a first church of modern architecture, it expresses the religious feelings thanks to the use of new materials and innovative forms. This building successfully searches the atmosphere of the sacred and materializes the transcendental idea. The use of light enhances the special climate of inner silence.

<sup>1</sup> LE CORBUSIER, "L'espace indicible" in CAVARRA, Britton, Karla, "Constructing the ineffable. Contemporary sacred architecture", Yale School of Architecture, New Haven, 2010, p.13

<sup>2</sup> Ibid., p.13

<sup>3</sup> GARGIANI, Roberto, ROSSELLINI Anna, "Le Corbusier: Beton Brut and Ineffable Space 1940 – 1965", EPFL Press, Lausanne, 2011, p.64

<sup>4</sup> Ibid., p.93

<sup>5</sup> Ibid., p.64

<sup>6</sup> Ibid., p. 65

The space of concentration and connection with God contributes to a viewer's awareness of the fourth dimension that Le Corbusier pursued. More importantly, the Chapel is built at the exact same location as the one previously destroyed during the World War II. This gesture gives it even more symbolical meaning.

The light and space evoke a sense of personal position not only physically but also in relation to the infinite, and similarly to the medieval cathedrals they bring the signal of the divine.

All these moves and architectural decisions create the unique character of the building and its spatial quality. It may even become irrelevant if the space is designed to be the chapel or not. Because of its strength and totality, it gets the sacred element coming from itself. Like the small experimental sculptures that Le Corbusier practised along his architectural work, the Chapel of Ronchamp became the resonant piece of art in the landscape, the synthesis of art, light, landscape and architecture.

Another similar way, taken by Corbusier to "construct the ineffable" was expressed by the design of Phillips Pavillion in 1958. Here again, his concept was to make a total project, where art and architecture create a complete unity. Thanks to the experience that brought the construction of the Chapel in Ronchamp, Le Corbusier was able to take step further and use the ruled surfaces (surfaces réglées)<sup>[1]</sup>, created mathematically in the continuity of the free - form surfaces from the past.

The concept of l'ouevre d'art totale was reinforced by the use of materials and the characteristic for the theory elements. Together with highly reflective steel panels, the exterior aimed to be again a purely geometrical form, reinforced by a small water pond. The pavilion becomes another interpretation of the ineffable space. It is capable of representing new figures and symbolic forces. [2] It becomes a real place with a cosmological meaning. The Poème electronique, which was designed to be shown in the pavilion was also conceived by the architect, and it allowed him to experiment with this new kind of ineffable. He was able to extend his ideas from having only a visual experience, to be more complete, affecting the acoustics and the promenade.

Everything was highly precise, like a machine that modernists always had dreams about. For the industrial society, not only house needs to be like a machine to be lived in, but any other building should be a very functional and effective construction. The intention of making the space transcendental is for Le Corbusier inevitably founded on perfectionism.

<sup>1</sup> GARGIANI, Roberto, ROSSELLINI Anna, "Le Corbusier: Beton Brut and Ineffable Space 1940 – 1965", EPFL Press, Lausanne, 2011, p.464

<sup>2</sup> Ibid., p.465

Every element should be carefully controlled to reach the fourth dimension and to manifest the unique spatial experience.

Thanks to the special commissions and attempts to create a new type of religious architecture, modernists had a field to explore alternative forms. With them they could have possibly opposed to the technological answers of their era. The case of Le Corbusier and his particular approach to the ineffable may be sometimes confounding or ambiguous.

On one hand, being engaged in the themes of rationalism, on the other deeply attentive to the spiritual dimension. [1] Having his personal experience of mystical transcendence brought by art, he enabled himself to see beyond. The space that loses its physical limits and its "boundlessness" [2] become almost an obsession for Le Corbusier and a specific way to pursue the intensive metaphysical and religious explorations.

<sup>1</sup> CAVARRA, Britton, Karla, "Constructing the ineffable. Contemporary sacred architecture", Yale School of Architecture, New Haven, 2010, p.14

<sup>2</sup> Ibid., p.14



#### 3.3 | The sacred today

How do we see the sacred in the modern society? What meaning did it gain if it is no longer related to the religion for the important part of humanity? There are probably things that people generally agree on that have a certain value. Most likely many of them do not realize about it, until those values are threatened.

In the contemporary world, no one wants to be told what he or she should believe in, what is right or wrong to do. Nobody today likes to understand the sacred as something "given", preconceived. The sacred received a much more individual significance. It started to refer to people's artifacts, history, memories and personal reflections. A dominant spirit of this age has relegated the sacred to the periphery of our lives, which is well expressed in a built environment. Until the enlightenment, church as a building had a leading position. From the XIX, XX century it still occurs, but modern architecture takes much more distance towards it, like modern society towards religious behaviours. [2]

In some way, the sacred and the profane today can be seen also as the timeless confrontation between right and wrong. It is about the construction versus demolition. Any developed society has its moral boundaries and the fundamental sense of reality. There are values with a profound meaning, things that stay within the cultural heritage and cannot be violated or changed. The essential feeling of being human is supported by the respect to the universal "sacred" that is a center for the acceptable limits within a community.

Living in the communication era, with all available technology and transportation, we appear to have a mobile kind of spirituality. Do we still need a physical shelter for this sensation or did architecture loose its place to provide the experiences? Polls show that even in the time of secularization, many people believe in God and religion has strengthened in last 50 years. [3] In the United States, where the standard of living is one of the highest, people admit that they still need a spiritual supplement. [4] From the other side too, the religion today is shaped like many other domains, by business and entertainment.

In today's epoch, the sacrality may risk of loosing the essential aura that it used to have. Nevertheless, according to Mark Taylor, the assumption that modernity equals secularity, is truly misleading. The increasing recognition for religious attitude cannot really occur. In fact, religion never left or suffered any major repression. The so-called return to the religion is a purely postmodern observation, as a reaction to modernity and modernization.

<sup>1</sup> CAVARRA, Britton, Karla, "Constructing the ineffable. Contemporary sacred architecture", Yale School of Architecture, New Haven, 2010, p.49

<sup>2</sup> Ibid., p.50

<sup>3</sup> Ibid., p.54

<sup>4</sup> Ibid., p.54

<sup>5</sup> Ibid., p.67

The religious and the secular should not be seen as the opposites, but in the contrary - secularization is rather a religious phenomenon. [1] This new kind of spirituality is probably in the center of today's contemporary culture. Yet, what are then the consequences for architectural means? As an implication, this new way of experiencing the sacred may shift to be a passage from belief to a hedonistic lifestyle. [2]

All the new patterns of behaviours will certainly not cause the end of religion in general. The so-called "traditional" form of understanding the sacred evolves, but it keeps its foundation in the transcendental relation with the universe. If it changes the importance for more and more people, it results in a new spirituality that can be represented differently.

One of the good examples of combining the metaphysical presence with ordinary, secular trajectories is work of Tadao Ando. Moreover, if we consider art as one of the elements that can produce the sacred feeling nowadays, it is the museum architecture that creates this new relationship. In buildings of the Japanese architect, also in his museums, there is usually some sort of strange combination and contradictory moves. Ando uses public gallery buildings as "surrogate religious institution of our age" in a search for his own understanding of spiritituality. With his Japanese background, he succeeded in working also for european projects and incorporating Christian symbolism linked to opposing ideology.

The search for spiritual presence should be visible in "everyday" projects, manifested in lightness, darkness and cosmogony. By overlaying profoundly different cultures with a symbolical nature worship, Ando achieves to overcome the dissonance faced by modern man. [4]

Indeed, the sacred today gets the interdisciplinarity and complexity that comes with more complex contemporary circumstances. The actual meaning, be it religious or not, can still take a critical stance and importantly shape cultural identities. Nevertheless, one may have the impression that it is increasingly difficult to confront himself with the "fourth dimension", even in the spaces like St. Peter's Basilica (See  $F \mid 7$ ). The ordinary reality of today does not wait for anyone to make reflection. Thousands of people visiting all the historical sites, museums or churches do not stop, maybe only to take another quick picture and put it online.

<sup>1</sup> Ibid., p.86

<sup>2</sup> STEGERS, Rudolf, "Sacred buildings: a design manual", Birkhäuser, Basel, 2008, p.10

<sup>3</sup> CAVARRA, Britton, Karla, "Constructing the ineffable. Contemporary sacred architecture", Yale School of Architecture, New Haven, 2010, p.106

<sup>4</sup> Ibid., p.110

Still, despite the constant run, everyone takes a moment of contemplation at some point. It can arrive with a death of a close one or in the moment of some significant events in wider community.

With constantly changing conditions in the dynamic world, the "call for numinous" remains. It requires an answer, a position taken by architects as visionaries for the new territory in the XXI century. Architects occupation, tied up with global environment and human emotions has to answer those new spiritual demands.

It might be found very difficult to define and live the sacred that was an essential element of our ancestors. A contemporary man will still either keep on cultivating his traditions or follow certain spiritual ideas, myths and behaviours. Although today the role of religion has substantially decreased and the spirituality has changed, it is certain that honoring the departed and their memory is profoundly anchored in the cultural legacy.



# 4 | Past and present

#### 4.1 | Death and society

Death has lost its place in the society, but it is slowly becoming more and more a subject of public debate as well as academic discussion. With newly shaping attitude, general openness and right architectural answers, it could get its position back. People of today are much more curious and open towards a variety of themes. In the matter of fact, there is a need of giving the opportunity for people to see, analyze and understand. Following the examples like Death in Venice, the exhibition from June 2014<sup>[1]</sup>, which brought a significant success in widening the public view on death and proved that the efforts pay off. Even though, we have to admit that all the subjects around dying and funerals are still uncomfortable and rarely become a highly ranked topic. Yet, death and burial are all around us, take part in the social and urban life of every modern city.

From the XX century, thanks to the major improvements in healthcare and hospitals, an average human life span increased from around 45 to 80 years old. [2] The discovery of penicillin led to a decline in deaths from infectious disease. At the same time, the invention of heavy and expensive medical equipment that needed to be kept central, gave us the modern hospital type. [3] This is also one of the reasons that a large portion of society passes last days of life in clinics or hospices. As typologies, they begin to be associated with depressing and very inhuman places.

From one side, death became institutionalized and medicalized. Not seeing something that disturbs or provokes emotions is more convenient. It could fit the hedonistic attitude presented as the only way to live. On the other hand, we do care about our little private memorials and try to not forget the ancestors. Death is deeply embedded in our culture and obviously the traditions change from country to country, but family graves do exist and form sort of individual monuments.

Death and remembrance are present and in fact, they constitute a gigantic market with continuous demand. Today, saying goodbye to someone who was close to you, can be hard as an entirely private matter. The mortuary forms now a multimilion dollar industry, including funeral homes, medical center or finally crematoria and cemeteries.

What has the highest value within metropoles is land, and any piece of unconstructed soil has a potential for buyers. In many countries there has been concern about running out of burial spaces too, particularly in large cities. From the pragmatic side of the problem today, missing lands, higher costs and questions of re-use do encourage a greater use of cremation.

<sup>1</sup> ENG, Karen, "Design for dying: A TED Fellow thinks deeply about the architecture of death" http://blog.ted.com/the-architecture-of-death-ted-fellow-alison-killing-rethinks-designfor-the-dying/ [11.11.2016]

<sup>2</sup> Ibid.

<sup>3</sup> Ibid.

The general view on the sacred had an undoubtful shift. However, the need of celebrating memory, its individual meaning and a nostalgic view on one's history are still present in modern life. Depending on the religious affiliation, the way of giving respect varies and multiple practices are held.

In order to better understand and organize the positions regarding different rituals and symbolism, the following chapters point out major conditions of religious practices. Inevitable differences can serve as a valuable inspiration for an architectural project in a specific context.

#### a | Religions and mortuary rituals

Individual habits, practices or followed myths, all shape cultural identities. Death is the ultimate act, the limit of existence and therefore it builds certain rituals and almost a code of behaviours to follow.

Different religious communities developed large range of rich and diverse practices. What characterizes the rituals is a common social attempt to secure and understand the grief, but also to solve a problem of individual who left the world of living. At the same time, the deceased are in a way involved in the ritual right in the center of events, while still being dead.

Depending on the religious affiliation, the chronology of the whole procedure may vary. However, despite the inevitable major discrepancies, we could underline particular recurring moments. Starting with death of an individual, it needs to be either announced to the family or when happening at home, communicated to funeral services. In some cases, it is followed by ritual washing and potential funeral watch before the ceremony. Coming after, the common practice is to escort the deceased with a procession leading to the ceremonial place.

The burial rite, according to the religion or not, is usually followed by cremation or inhumation. [1] The rituals not connected to any denomination appeared in the XIX century with the general decrease of practices. Those new secular habits, conducted by representatives of funeral homes are defined by the authorities. They turn also towards more secular spaces and clearly impact the "death policy" in the cities.

Today, the contemporary metropoise is an open, multi-cultural space, where social and urban factor is composed by the wide range of communities. To see what implications it may have, it is worth to have a brief look into specialized doctrines and to emphasize the undiscovered, unfamiliar influence from Asia to the Western culture.

<sup>1</sup> THOMAS Louis-Vincent, "Rites de mort : pour la paix des vivants", Fayard, Paris, 1996, p.57-77

Jewish traditions see human body as a "house of soul", therefore as an holy object. It may be assumed than Jewish people are much more pragmatic than other cultures, with their rather short, "as soon as possible" ceremonies. Judaism does not support any artificial support for the body, seeking to dignify a person's passing. Accordingly, even viewing the body is perceived as a lack of respect. Caskets are usually bare wood, there are no decorations, no flowers. Conform to traditional practices, the funeral is usually held in a synagogue or funeral home the day after one's death. There is in general no visiting by friends or family before the funeral. Most of all the deceased are buried in the ground, but mausoleums are also acceptable. The service is conducted by a rabbi with the family participation, readings and final act of placing dirt on the coffin right before the burial moment. Cremation is not supported as a direct negation of resurrection and is contradictory to the cult of body.

A similar belief concerns the Muslim community, where interment is the only possible way for burial. According to Islam, death is a transition to "other" infinite life. It is a passage to the truth to meet the divine. It is not an event dedicated to the individual but to the whole family, community and a city. In principle, death should be not hidden and rather announced to all members of association. There are four important points included in the ritual and no one can be buried without them. All deceased need to be washed following a specific rule, to be further enveloped in a proper fabric without any clothes. [3] Lastly, after making a specific final prayer, the body can be put into ground, either in a Muslim cemetery or in an exclusive area within communal space.

In the Christian religions, all based on the Bible, there are several elements that create particular approaches within the same belief. Christians have a strong belief in the afterlife and much of their lives are directed at achieving eternal peace in heaven. From Catholics to Mormons and Lutherans, Christianity has inspired many other religions, each with its own emphasis and interpretation of the Bible. Yet, these denominations hold slightly different beliefs, they follow the same principles and share similar funeral rituals. Protestants were historically little concerned with funerals. With the XVI century interdiction of pastor's presence at the funeral, the religious part of the ceremony took place in temple to be later conducted by funeral director at the cemetery. After cremation or burial with a general practise "at the line", where everybody is equal, family of the deceased gathers together or a fraternal moment without special celebration. [5]

<sup>1</sup> READNOWER, Cindy, "Jewish funeral traditions keep heritage alive", URL: http://blog.everlastingfootprint.com/2015/05/19/jewish-funeral-traditions/ [01.12.2016]

<sup>2</sup> Ibid

<sup>3</sup> VILLE de Lausanne, "La mort dans tous ses états" - Exposition des Pompes funèbres officielles au Forum de l'Hôtel de Ville, le 4 octobre 2016.

<sup>4</sup> MERTES, Jenny, "Christian funeral service rituals", URL: https://www.funeralwise.com/customs/christian\_overview/ [01.12.2016]

<sup>5</sup> JONES, David W., "To bury or burn? Toward an ethic of cremation", JETS 52/2, June 2010, p. 335-347

Although the belief of a communion between dead and living does not exist, cemetery is still a place of memory and peace. The Ortodox Christian society, similarly to previously mentioned Musilms and Jewish do not allow dead believers to be cremated. Body, as a Temple of the Holy Spirit is sacred and needs to participate in the final restoration of all creation. The traditional burial service is held usually three days after death and a priest heads a ceremony at the cemetery. For the Ortodox there are different forms of departures - either agony or peaceful sleep, that allows the soul to enter the paradise.

In comparison with the preceding groups, Catholics seem to float somewhere in between, with constantly evolving and open society. The funeral in general is an occasion for the whole community to give respect and offer solidarity with family in mourning. The ritual is composed by a funeral mass and a service on the cemetery. Recalling the important events from life of the deceased, reading the Word of God and introducing the symbolism are intended to evoke the time of one's baptism. The light of paschal candle, holy water, the cross and incenses are supports for the prayer to express what is hard to tell during emotional time. The questions about symbols accompanying Christianity and Catholics with their attitude towards cremation will be treated in the following chapter.

Buddhism as a philosophy of temporality, considers death as an integral part of transformation cycle. Mourning rituals are strongly inspired in this vision, but depending on the region, principally in Asia, can diversify between cultural backgrounds, provinces and family traditions.

Some funerals are very ritualistic and historical, others simple and dignified. Usually, there is an altar with the deceased's portrait, candles, flowers and incenses. The ceremony can be performed by a Buddhist monk, or if needed by family or other mourners. Although Buddhists see death as not the end of life, only a transition, they accept and cultivate grief. The focus however, should be on the transiency of life and thinking about one's own mortality. [2]

In the countries like Japan, 99% of burials involve cremation<sup>[3]</sup>, where the majority follows the Buddhist ritual. Despite the fact of visible advancement comparing to the occidental practices, interments dominated also in Japan until the XX century. [4] Yet, what is interesting is the fact that in many cases, people not involved in religion, when coming to the passing of someone loved, they turn to their parish and ask for a ritual goodbye. Japanese society known as very practical and minimalist, widely supported and developed the practice of cremation. In the recent years, increasingly aging society with nuclear families turns to small, inexpensive and more intimate funerals than traditional services.

<sup>1</sup> JONES, David W., "To bury or burn? Toward an ethic of cremation", JETS 52/2, June 2010, p. 335-347

<sup>2</sup> VILLE de Lausanne, "La mort dans tous ses états" - Exposition des Pompes funèbres officielles au Forum de l'Hôtel de Ville, le 4 octobre 2016.

<sup>3</sup> CIESIELSKA, Joanna A., "Obrzadek ciałopalny w tradycji starozytnej i współczesnej Japonii", Antropologia Religii V (2013), pp. 48-55

<sup>4</sup> Ibid.

Far East attitude, influenced by the religious affiliation, supports the concept of letting the soul go to discover new living. Crossing the gate of death, spirit is able to start a new journey, a departure to go beyond and do not stay in the world where it does not belong anymore. In Eastern cultures, where death is approached meditatively, it becomes a crucial point to complete the cycle of energy.

Certain groups of Buddhists or Hindu practice sky burials, where bodies are left to decompose and be lacerated by carrion birds. However, the traditional outdoor cremations are prescribed methods of disposal that bring human back to the union with earth. Public, open ceremonies encourage to witness the ritual, to confront death and to remind about one's vanishing. Inspiring waterfronts of Varanasi in India create an extraordinary context and a connection to the world beyond. As a place with a "hierophanous" character gives the impression of a descent of divine to the nature, heaven to earth. Here, where the light and fire become an icon, the temples are consecrated by rites. This direct contact with nature, light and darkness can inspire the ecumenical sensibility to reach the ineffable. This theological content may be seen as universal, drawing on the image of Christ as the light and the Buddhist enlightenment that makes one realize being in the dark until that moment. [2]

The examples coming from the Far East could directly inspire the Western culture. Places like the Temples of Light with their prudence and clarity emphasize the pure ritual and relation to the nature. The immediate transcendence of this site enables imagination and inspires, how "tirtha" could be constructed, or rather more accurately - how to enable others to perceive the sacred, by using architecture as a device.

#### b | Towards cremation

While cremation for the eastern cultures is often connected to the cult of fire and religious traditions, in the ancient Greece and Rome was driven by the hygienic reasons, and today in the modern world enters into the pragmatism and practical logic. The territorial economy was always a major issue for progressive urbanists and architects from the beginning of the industrial society. However, the remarkable growth of interest on cremation between the First and Second World War constitutes only a part of the large evolution in Europe. Opposingly, it is the widely known and until now leading, traditional form of burial that played a secondary role from the prehistory through the ancient times. During the Roman Empire, it was cremation that dictated funeral rules.

<sup>1</sup> CAVARRA, Britton, Karla, "Constructing the ineffable. Contemporary sacred architecture", Yale School of Architecture, New Haven, 2010, p.118

<sup>2</sup> Ibid., p.118

<sup>3</sup> Ibid., p.115 - Hindu term for sacred space

<sup>4</sup> RAGON, Michel, "L'espace de la mort essai sur l'architecture, la décoration et l'urbanisme, p. 3 funéraires", Michel, Paris, 1981, p.287

First Christians, often poor, were mostly buried, which spread this practice - but following the tradition and not by dogma. [1] It was in 785 when the incineration got prohibited by Charlemagne's edict, referring to the pagan practices. Almost from that point on, until the times of humanism and Lutheran schism the cremation got completely forgotten.

However, Europe seemed to still not be ready and the attempts during the French Revolution and after that did not really succeed in popularizing incineration. The acceptance of cremation practices comes only with the end of XIX century and the first built crematorium in 1876 Milan. [2] At that time, the Internatioal Congress of Medical Experts in England denounced burial as not hygienic, which helped to promote cremation as the norm for the sake of public health. Around 14 years later the first mortuary building equipped with furnaces was built in Switzerland, which throughout XX century became one of the leading countries in the rate of cremation. This period is marked by a technological and scientific advance. With the Industrial Revolution many societies modernized and their traditions evolved. [3] Cremation became a specific factor for social change, often coming back from the zone of illegal activities.

The popularization of cremation practices in Chritian-rooted Europe progressed in large measure thanks to Protestant regions. Historically, the countries with Lutheran or Anglican backgrounds had a higher percentage of cremated deceased. However, one of the most significant shifts, falls in 1964 when Pope Paul VI at the Second Vatical Council officially changed the position of Catholic Church.

The acceptance of still dominating religion of European society enabled this type of funeral to enter to even the most conservative territories and start to change mentality and rituals once again. Human societies are objects of continuous change, where important role of urban reforms and attention to ecological aspects shape attitudes. Pollution and contamination factors encouraged disposal of bodies by fire in professional and controlled facilities. Today contemporary issues related to religion, finances and sustainability shape views on death, and result in a reemergence of cremation as a dominant practice.

Cremation is the most literal adaptation of the words "ashes to ashes, dust to dust". In itself, the idea of cremation is very powerful, carrying meaningful symbolism and almost direct transcedence. Glorifying notion of incineration is well summarized by the encouragement of the symbolist Maurice Maeterlinck - "Purified by fire, the memory lives in the heights as a beautiful idea; and death is naught but an immortal birth cradled in flames".[4]

<sup>1</sup> JEANNERET, Jean-Daniel, "La crematoire de La Chaud-de-Fonds", Ville de la Chaud-de-Fonds

<sup>2</sup> Ibid., p.4

<sup>3</sup> DAVIES, Douglas J., MATES, Lewis H., "Encyclopedia of Cremation", Ashgate, Aldershot, 2005, p.19

<sup>4</sup> MAETERLINCK Maurice, "Death", in HEATHCOTE, Edwin, "Monument builders: modern architecture and death", Academy Editions, Chichester, 1999, p.36

The significance of symbols like materialization of the sun, the fire illuminating funerary space and ashes coming back to the ground or water, all create the recurring, ecumenical notion of purification and eternity.

#### c | Christians, symbols, mentality

Christianity refers to the memory, to the remembering and loving others. The sacred needs to connect with a collective remembrance, concerning all members of society. It influences the future too when expecting resurrection with hope coming from faith. In the Judeo-Christian European tradition, there are many highly symbolic and important elements that define funeral ceremony. Signs and symbols, mainly specified by water and fire, reoccur in the Bible and accompany every important Christian ritual. Both get consecrated during the Easter, to be later used during the whole following year. [1]

The Catholic funeral ceremony refers to three main figures that during the service spiritually connect the committee with God. Through the light of paschal candle, Christ comes to the assembly, just like during the baptism symbolizing hope and faith. Similarly, returning to the time of one's first Christian sacrament, holy water and incense are used to bless the departing and mark the entrance to the afterlife. Finally, the ultimate moment of separation, either by interment or by deposit of the urn is followed by last prayer - "Unless a grain of wheat falls into the earth and dies, it remains alone; but if it dies, it bears much fruit" (John, 12,24). [2]

The Church always expressed a belief the body should be treated with respect, which still brings cremation to question for some believers. Shown by the prayers and gestures in the liturgy, the traditional burial in grave may be seen as preferred, in memory of Jesus' body placed in a tomb. Nonethelees, if cremation is chosen, the Church will celebrate funeral rites upon the condition that it was not designated to deny Christian belief.

Full celebration of a Christian Funeral consists of three main "stations" - the vigil for the deceased, the funeral Mass with liturgy of the word and the committal rite celebrated at the body's final resting place. The ceremony is quite flexible and can be performed either with the body before the cremation, which is preferred, or with the cremated remains. Depending on conditions, few adaptations can be done and the service may happen while remains were interred before the funeral. [4]

<sup>1</sup> Fr. K. Ciurko, Personal interview by the author. Lausanne, October 30, 2016.

<sup>2</sup> JONES, David W., "To bury or burn? Toward an ethic of cremation", JETS 52/2, June 2010, p.345

<sup>3</sup> Ibid., p.347

<sup>4</sup> CATHOLIC, Cemeteries & Funeral Services, "Catholics and Cremation", URL: http://www.catholic-cemeteries.com/Catholics\_and\_Cremation\_1189720.html [02.12.2016]

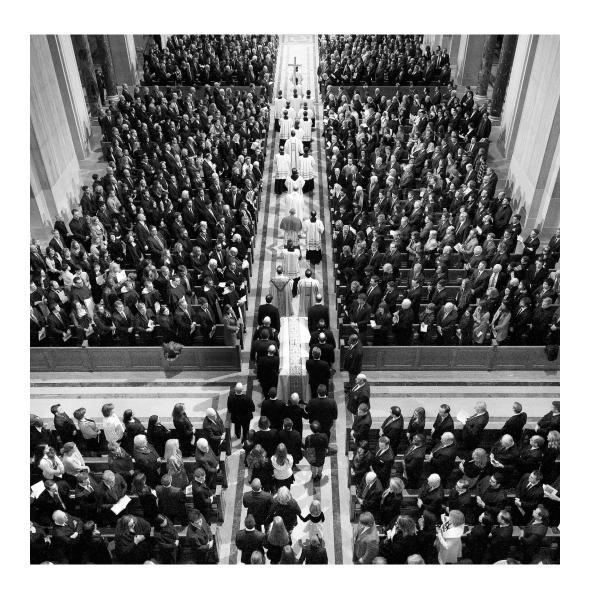
A respect for the deceased has its evident consequence in the way the remains are treated after cremation. Normally, they should be buried in a grave or entombed in a mausoleum or columbarium. A proper place of burial gives an opportunity of remembrance and prayer, therefore according to the tradition, scattering ashes on the sea, in the air or any other use is inappropriate and not supported by the Church.

Surprisingly after all, rituals within the Catholic Church are not that "inaccessible" and conservative as it may seem at first glance. Cremation must be viewed as an adiaphora issue, so morally neutral, not essential to faith. In fact, the ritual can help "humanize" cremation, the whole event of separation and the end of life. The Church offers texts, prayers and gestures for different moments and the ceremony can still be flexible.

What is essential is that bereaved family gets support and feels spiritual connection with gathering of brothers in faith. Within the Christian tradition, funerals are not only ways of disposing of dead bodies, nor are they about commemorizing the departed and grief. This very metaphysical moment is about Christ, the message of hope and eternity. Like during the funeral at Basilica of the Immaculate Conception (See F  $\mid$  8), every member of community shares this meaning by his presence and worship.

<sup>1</sup> CATHOLIC, Cemeteries & Funeral Services, "Catholics and Cremation", URL: http://www.catholic-cemeteries. com/Catholics\_and\_Cremation\_1189720.html [02.12.2016]

<sup>2</sup> Ibid.



## 4.2 | Death and architecture

Trying to express space considered as ineffable by physical means, is a certain paradox. Architecture needs to balance on the thin edge of unknown and try to materialize something that is not visible. If we can consider death and individual memory as contemporary forms of the sacred, it means that the architecture that embodies it, represents the world of the profane. In this sense, it could be understood that the funerary design emerges somewhere in between those two entities. To approach this kind of project today, stands almost as provocative. However, if a part of society needs the sacred, then following Karsten Harries argument - "the sacred needs architecture and similarly, architecture needs the sacred".[1]

However, what should we call sacred space after all? What brings a certain kind of special energy to a bulding dedicated to celebrate something that does not come from this world? It is possible that the power lies in the intellectual attitude to design the space. At the same time, it needs to have a higher purpose to make more than just a space or a built object. The religiously associated architecture should go beyond, considering system of interactions and transcendency. Fundamental sensuality, movement and relations need to look for common sense, deriving from architects creativity.

The Le Corbusier's idea of the "ineffable space" is an useful term for the elements that need to confront with religious buildings. This factor of going beyond programme and functionality adds up to creation of indescribable emotion. The complexity of sacred architecture has a long history of influence on architectural expression. From Hagia Sophia and Gothic cathedrals to modernist and minimalist detailing, the typologies and their meaning for users widely took inspiration from religious subjects that offer broad range of architectural mediums. With the recent shift of western democracies towards more individual decision making and rise of more focused policies, religion can offer stability in one's life and peace in contemporary times. This can produce new opportunities and "exciting times" for architects.

The cases of taking the given circumstances to advance and invent may be illustrated for example by Auguste Perret, Frank Lloyd Wright or Louis Kahn. Their revolutionary projects of modernism epoch turned reinforced concrete "into live" and created new meaning of monumentality. Their ecclesiastical buildings provided a basis for new type of architecture and a turning point in the XX century. Both, Unity Temple of Wright and Notre Dame de Rainy of Perret used materials in the new way to create geometrical manipulations and a new kind of aesthetics. Those decisions allowed to spatially reconsider the traditional religious building type, making foundation for the emerging phenomenon. [4]

<sup>1</sup> CAVARRA, Britton, Karla, "Constructing the ineffable. Contemporary sacred architecture", Yale School of Architecture, New Haven, 2010, p.24

<sup>2</sup> PALLISTER, James, "Sacred Spaces: contemporary religious architecture", Phaidon, London 2015, p.10

<sup>3</sup> Ibid., p.15

<sup>4</sup> CAVARRA, Britton, Karla, "Constructing the ineffable. Contemporary sacred architecture", Yale School of Architecture, New Haven, 2010, p.16

Moreover, also Kahn's ambitions of achieving the "feeling of eternity", with the influence of ancient civilizations, are expressed in his interpretations of monumentality. The projects of Unitarian Church of Rochester or the unbuilt Mikveh Synagogue, are direct expressions of real interest in "spiritual quality inherent in structure which conveys the feeling of eternity". [1]

At the same time, to build always means to test, to take the path of constant uncertainity, to accept the high degree of unknown and unpredictable result. The idea and the vision lead to the pure "product of the mind", and a "process of creation that constitutes architecture" - like Etienne-Louis Boullée said about his Cenotaph for Newton [2]. This emblematic project of unexpected scale, pure monumental forms manifests the strength of conceptual thinking about the space. The funerary monument creates the memorial of intelect that produces its own world, new conditions and forces.

Architectural sacred spaces need to be a part of this trenscendental concept, even if not related to the specific religious confession. A part of living the time that we have, is in some way about trying to find the Absolute ourselves, without simultaneously making unnecessary over-interpretations. Yet, the architectural challenge should not be about "monumentality", but rather about the ambition to achieve a spiritual relation between human, environment and rituals.

Funerary architecture as a particular part of sacred design had historically not a less significant role in civilization. From Antiquity to the present day, many of important European constructions were designed to honor the dead and their memory. Many of vanished societies left their tombs, cemeteries and mausolea to become sources of knowledge and inspiration. Most of the history though, when kings had their tombs and pyramids, a majority of poor people had to share a common grave. The modern view on the individual and the right of memorial created and developed the need of manifestation through the funeral culture. It used to be much simpler too, at the time of rural Christianity, where most of the people were buried in the nearest churchyard.

Together with churches and chapels, the funerary branch of architecture, followed both cultural and ritual changes, contributing to the domain's pursuit for innovation. At the center of this burial topic, there is naturally the human body. What is difficult to realize, is that it spends more time in the final resting place, than any other dwelling inhabited before. House with its symbolical meaning accompanies its owner until the time of his death. Then as a tomb, it becomes an ultimate shelter - memorial.

<sup>1</sup> KAHN, Louis, "Monumentality" in CAVARRA, Britton, Karla, "Constructing the ineffable. Contemporary sacred architecture", Yale School of Architecture, New Haven, 2010, p.23

<sup>2</sup> BOULLÉE, Etienne-Louis, "Architecture, Essay on Art". Edited and annotated by Helen Rosenau. Translated by Sheila da Vallée, p.82

<sup>3</sup> WORPOLE, Ken, "Housing the dead", Architectural Review, Death, Issue No. 1436, November 2016, p.8

<sup>4</sup> HEATHCOTE, Edwin, "Monument builders: modern architecture and death", xAcademy Editions, Chichester, 1999, p.10

According to Adolf Loos, it is exactly where the body was buried and the simplest construction of soil and human remains is raised, there the most archetypal image of architecture is created. [1] Recent "background" position of funerary design is partially caused by cultural and social influences. On the other hand, abandoning spirituality and symbolic values pushes today's churches, temples and cemeteries out from the architectural mainstream. Places dedicated to the dead part of society, which paradoxically grows faster than the living, are left out as the urban voids.

One of the risks that threatens designing in death environment is that it can easily start to evoke historicism or anonymity. With a very little interest, spiritual spaces tend to stop participating in the dynamic metropolitan tissue. Is it still possible for this kind of architecture to step out of the evident location within the cemetery and come back to public sight?

## a | Cemetery

Sometimes being passed every day, they still remain unseen - the most familiar death related image for city inhabitants. Necropoles from the Roman times were placed at the outskirts of cities for hygienic and symbolic reasons. This first kind of primitive urban arrangement was composed by simply aligning the tombs by the fortifications. This notion not being revived in the Western culture had to result with the Middle Age, centrally located and overloaded burial sites, dominated by Christians. Becoming a paradoxical and impossible to handle, lost space in the center that created the most noises and perturbances for Medieval city, cemetery in this form inevitably needed to change. With humanism of Renaissance, the individual gains importance and death gets a more theatral image. Still located around the churches, close to the green spaces and main squares, a dead part of downtown keeps it significant position in human everyday life. The exclusion started in the XVII century with first walls that started to enclose cemetery, isolating it from profane activities that extended from market places up to prostitution. At the time, the concern about death was still rather little.

The cemetery could continue its functions as communal "civic center" that attracted all public activities, having the significance coming from anywhere but its primary meaning. [2] Then, the industrial revolution radically changed the vision of how to make the city, with the cemetery being idealized and refused from consideration only as a functional space. The associations to the necropoles started to have the vision of open space, parks and city promenades. [3]

<sup>1</sup> LOOS, Adolf, "Architecture", in HEATHCOTE, Edwin, "Monument builders: modern architecture and death", Academy Editions, Chichester, 1999, p.10

<sup>2</sup> RAGON, Michel, "L'espace de la mort essai sur l'architecture, la décoration et l'urbanisme funéraires", Michel, Paris, 1981, p.215

<sup>3</sup> CURL, James Stevens, "A Celebration of death: an introduction to some of the buildings, monuments, and settings of funerary architecture in the Western European tradition", Constable, London, 1980, p.105

However, the heroic era of the great urban cemeteries came in the XIX century and creations of private monumental structures. In many cases, they were designed by the same people that were responsible for public space projects. Together with elaborate rituals for funerals, mourning and processions the cemetery received a new kind of attention. The rupture moment came with the removal burial spaces from the city centers, which fragmented the urban tissue and literally separted the deceased from the living. The disposal of dead bodies did not much differ from evacuating the waste products. The XIX century ideas again individualized death and the deceased had their own, named grave that modified the vision of funeral space.

Those notions produced new prototypes for urban solutions and the cemetery as typology evolved to become either more like the city of the dead - a paradise place or more secularized vision of English landscape garden. The spiritual dimension continues to be researched by nature and death may begin to be expressed more by the absence of architectural, physical solutions. It is the cemetery itself that assumes the symbolic meaning of vanishing and the fact that everyone is equal at the time of his death. This important factor shaped the thinking of Sigurd Lewerntz and Erik Gunnar Asplund for the project of Woodland Cemetery in Stockholm. Surpassing the limits of Christian iconography, they relied on site natural attributes like valley, earth, forest and views to evoke associations of death and rebirth in landscape. The whole site of this complex embodies a stylistic transition from classicism to modernism that together with scenery of pine forest, contribute to the bigger picture of unity between the nature, architecture and the spirit.

More recently designed, considered to be the most successful contemporary cemetery in Igualda by Miralles Pinos and Chipperfield's extension to the San Michele Venetian site, both contribute to re-assessement of funerary typologies. The project in Spain reuses the abandoned quarry and re-qualifies the surroundings with materials that recall to the character of the place. Architects created a clear threshold with a processional path, where individual niches are placed in concrete walls and family tombs that communicate with nature. The severity of environment allows the cemetery to reach to profound spiritual presence and a meaning of the cycle of life - the link between the past, present and future.

Similarly, David Chipperfield's office tried to redefine the physical qualities at the historical site of Venice's principal cemetery. The two phase project proposes a new arrangement of buildings, tombs and landscape. Instead of linear, regular grid distribution, the planned insertions are organized into groups of volumes to form settlements and enclosures.

<sup>1</sup> CURL, James Stevens, "A Celebration of death: an introduction to some of the buildings, monuments, and settings of funerary architecture in the Western European tradition", Constable, London, 1980, p.105

<sup>2</sup> MILLER, Atelier di progettazione Professore Arch. Quintus Miller, "Cimitero", Colophon, Universita della Svizzera italiana, Accademia di Architettura di Mendrisio, 2016, p.33

<sup>3</sup> Ibid., p.33

<sup>4</sup> WORPOLE, Ken, "Housing the dead", Architectural Review, Death, Issue No. 1436, November 2016, p.6

With the new principles of views and gardens, the project tries to re-interprete the existing relationship within the island, but also its extension aims to create much more open image and an accessible monument that interacts with the whole lagoon and provides it a greater sense of place.[1]

Those attempts are in a way the new beginning of reformulating the public foresight on death in general. The cemetery is a part of the city that rarely becomes a point of attraction like a cathedral or a main square. Yet, it is still a part of civic, social space, but what is the real meaning of its presence? What makes it special, is that when you enter this "urban island" you somehow feel the connection with your own invisible memory. Religious or not, the individual remembrance and union with the "fourth dimension" can create the atmosphere of the city of the dead.

#### b | Chapel

Usually as a part of the complex at the cemetery or sometimes a separate landscape object, chapels strongly contribute to the funeral typologies and often get a substantial meaning. Funerary chapel make an image and represent the sacred atmosphere, materializing a kind of specific territory within the regular "death landscape" that may surround it. While the cemetery can be considered as a break in the profane space, the chapels become the necropole's radiating center that gives it the fundamental axis. They often constitute an entrance to the complex, its heart or a symbolical culmination of main paths.

Approached from the straight passage called Seven Springs Way, The Chapel of Ressurection (See F  $\mid$  10) at Woodland's Cemetery stands at the far end of the site. With its look of neoclassicist temple and, at first strange decisions taken by Lewerentz, it may confuse or do not reveal the real character of this place. The entrance that concludes the long ceremonial path with monumental portico is in fact only visual due to the chapel orientation. To enter from the north - south axis, one needs to make a ninety-degree shift to get to traditionally, east - west oriented chapel.

To illuminate the space in the main ceremonial hall, thee is only one, asymmetrically placed opening with Mannerist details. As an object, the chapel contrasting white building enters to the Platonic system of Woodland's forest, breaking the order and ambiguously completing it. [3]

<sup>1</sup> HEATHCOTE, Edwin, "Monument builders: modern architecture and death", Academy Editions, Chichester, 1999, p.92

<sup>2</sup> CARUSO, Adam, "Sigurd Lewerentz and a Material Basis for Form", OASE Amsterdam, January 1997, Issue 45/46, pp. 88-95

<sup>3</sup> HEATHCOTE, Edwin, "Monument builders: modern architecture and death", Academy Editions, Chichester, 1999, p.78

Sigurd Lewerentz is one of the great inspiration for contemporary generation too. His influence cannot be neglected when looking at works of Swiss architect, Raphael Zuber and his funerary building for competition in Steinhausen. Differently to the previous one, this chapel becomes the entrance to the site. Both, are used as connection - passages spaces with separate entrances and exits. Again, with strange elements like floating, not load-bearing columns and a hanging wall, the chapel becomes a part of endless system.

The brick facades of Zuber's building clearly recall another remarkable example from Sweden, designed by Bernt Nyberg - the Klockarebackens Chapel (See F | 9). It is a precise exercise in the balance and geometry, where two independent roofs inscribed in two squares represent the approach of creating the series of formal and material thresholds. The Chapel is a thought out masterpiece, a controversial manifesto of tectonics, where impossible connections of steel, brick, glass and wood reoccur allover the building. The attention to details has impressively real execution and every element reveals the well-used opportunities.

What all those projects have in common is the ability to create poetic interpretations with simple and direct decisions that sometimes may seem awkward or just stupid. On the other hand, this honest motivation of putting things together and "only" solving the problem, proves that the transcendence searched by funeral design can be achieved by a thoughtful and purposeful methods.

#### c | Mausoleum, columbarium, memorials

Tomb buildings appeared as commemorative monuments next to "ordinary" graves. The eye-popping icons like the Mausoleum at Halicarnassus worked exactly like the ancient pyramids of Egyptians. [2] In addition to constructions for emperors, martyrs with their great tombs of spiritual power, led the tradition to constructing cathedrals as "founded" on the tombs of the saints. The tomb as an ultimate human's house became an object of memorial architecture to an individual life, leading to the cases where a freestanding mausoleum is a "church memorial", like the Taj Mahal. [3]

The idea of great monuments that created the new world, memorials that derive from the shadows was substantially developed by Boullée. Empty cenotaphs, representations of the cosmos and "order in infinity" created another kind of recognition for burial constructions. [4]

<sup>1</sup> HALL, Matthew, "Klockarebackens Funeral Chapel", http://hicarquitectura.com/2017/01/bernt-nyberg-klockarebackens-funeral-chapel-hoorsweden/[06.12.2016]

<sup>2</sup> WILKINSON, Tom, "Typology: Tombs", Architectural Review, Tombs, Issue No. 1423, September 2015

<sup>3</sup> Ibid.

<sup>4</sup> VIDLER, Anthony, "Reputation. Louis-étienne Boullée", Architectural Review, Tombs, Issue No. 1436, November 2016, p.52

The imaginary, almost unrealistic works profoundly changed the view on monuments and while none of them was realized, the mausolea became a popular building type, to reach their zenith in the XVIII century. Pure geometries of cones and temples constituted the extraordinary genre of "architecture of shadows".[1]

Side by side with conceptual and visionary works of Boullée or Ledoux, the realized projects of their contemporary successors try to achieve the same eternal aura when approaching funerary monuments. Yet, the vision of death never left society and when in the XIX century met the utilitarian ideas and hygienic problems, resulted in new type of architectonic language.

The ideas of powerful central building, single circular space became a considerably influential topos for memorial-related functions. Almost overwhelming axiality, scale and "weight" of the design stayed in minds of architects in the XX century.

In our era, Aldo Rossi, who held the works of Boullée as an example of new typology, represents the powerful images, shadows and landscapes, as in the already iconic San Cataldo Cemetery. Its axiality, articulations and platonic forms strongly remind of the "architecture parlante" of the ancestors. The massive, most important aspect of the scheme - the cube, was initially intended to be a cenotaph, an empty tomb that later became the structural house for memories. Rossi used the individual architectural elements and symbolic forms to construct a metaphorical city of the dead.

The archetypes and analogies exploited in San Cataldo create the very concept of inevitable confrontation with death. Project found by many as depressing is at the same time metaphysical. The necropolis, enclosed by columbaria walls that become streets of memories [3] receives a direct relation between the living and the deceased, a celebration of the collective memory.

Columbaria as spatial structures to house urns with ashes constitute another type of answer to the funerary needs or commemoration. The shelf-like construction arranged in the alleys or layers of architectonic skeleton, like at Rossi's proposal can become even more expressive than a regular cemetery. The spatial framework contributes to the public sense of understanding [4] and allows visitors to participate in commemorating the departed.

<sup>1</sup> VIDLER, Anthony, "Reputation. Louis-étienne Boullée", Architectural Review, Tombs, Issue No. 1436, November 2016, p.53

<sup>2</sup> HEATHCOTE, Edwin, "Monument builders: modern architecture and death", Academy Editions, Chichester, 1999, p.185

<sup>3</sup> Ibid., p.186

<sup>4</sup> RAGON, Michel, "L'espace de la mort essai sur l'architecture, la décoration et l'urbanisme funéraires", Michel, Paris, 1981, p.316

The memory today can take a variety of shapes to interact with the urban landscape conditions. With death moving to the background of the memorial reality, some of the contemporary forms of "monuments" can easily loose their meaning, but paradoxically then become more visible to the eyes of public.

The so-called memorial gardens create an image of idyllic landscapes, where people can finally forget about the sadness of dying. They are rather considered to be magical places to pass free time without being bothered with contemplating nonsense philosophies. Does it work only as a barricade from the real feeling or maybe the new collective memory is in the end, about something else?





## 4.3 | Crematorium as a total building

Despite the rich history spanning from the antiquity, crematoria in the western culture started to emerge in the end of the XIX century. The period of technological changes, but also the radical and secularizing impulses and the fear of pollution encouraged bringing the use of fire back to the civic life. It brought new methods, new mentality and the "renewed" building type. In the first decades of cremation, the movement was strongly associated with free-thinkers, exotic alternatives coming from colonial experiences and even anti-clerical tendencies. [1]

Nevertheless, the first crematoria, trying hard to oppose to the Church as an institution, were paradoxically constructed as church-like, almost grotesque, secular compositions of functions. Unfortunately, in the majority of cases, the aggregations of arcades, chapels, columbaria and towers seemed banal, poorly designed and uncomfortably unresolved. [2] Many of them, for some reason tried to mirror church appearance, suffering from a philosophical confusion and a lack of functional basis.

Early examples in Britain (Manchester), Italy (Milan) and France (Paris), carried the enthusiasm of counter-Church movement with classical temple disguise. The major problems that designers had to face are in fact the ones that reappear today and still need to be struggled with. The concerns of essential issues like placing furnaces, a chimney form, landscaping or a path of the deceased resulted in the absence of ritual. This lack of ceremony caused the undetermined sequence of spaces. [3]

This relatively new typology is about a specific building, on a thin edge between the religious and functional type. Here, the problem of unifying the sacred that should be in the foreground, with the technical behind it, seems to discourage the architects and turns back the attention that is required. This building model, born with the modern cremation movement caused the awkward application of religious aspects to the system. Sometimes fairly uncomfortable designs were loaded with technological innovations like mechanical belts, trap doors and motorized curtains.

All of these elements produced and they do it until now, the sad sentiment of almost anti human kind of ambiance. Alongside with that, more and more banal or euphemistic attempts like "brighten up chapels with light woods, plastic seats and pastel colors" [4], contribute to the depressing image that pretends to alter the reality.

 <sup>1</sup> CURL, James Stevens, "A Celebration of death: an introduction to some of the buildings, monuments, and settings of funerary architecture in the Western European tradition", Constable, London, p.302
 2 Ibid., 310

<sup>3</sup> WILKINSON, Tom, "Typology: Tombs", Architectural Review, Tombs, Issue No. 1423, September 2015, p.58

<sup>4</sup> CURL, James Stevens, "A Celebration of death: an introduction to some of the buildings, monuments, and settings of funerary architecture in the Western European tradition", Constable, London, p.311

What is common also today is the situation where a burial ceremony is entirely held by the undertaking services. Becoming more "linear", a crematorium stops to deal with the real emotional needs and often becomes only a highly functional machine, modernist death factory, leading towards nothing but a "decorated shed". [1] The beginnings were rough and in most places, the lack of solid decisions or a will to confront with the reality of death, sadly led to "correct" and neutral spaces.

However, the examinations of emerging type took a serious shape around the time of the First World War. A number of exceptional crematoria started to arrive from Czechoslovakia, Austria and Germany to the northern countries, where the beginnings of new investigations led to the necessary evolution. This new language that combined monumental archetypes with Expressionist-influenced forms [2], was unfortunately moved to another track by the coming to power Nazi influence.

Nevertheless, the attempts to get away from ineffective, banal answers were still made. The sensation of utilitarian "cold box" can certainly be ameliorated and some powerful examples were completed by master builders, notably coming from Scandinavia, thanks to its Lutheran traditions. Yet, despite few exceptions, the field of crematorium typology stays surprisingly untouched and becomes commonly avoided. With the task being either too frightening or too discouraging, the opportunities for architectural solutions were until now largely unexploited.

Crematorium is a deeply philosophical, cultural place of high importance. It is in a way very different from any other typology, but also distinctive any other sacred place. Considering the sacred side of its nature, the difficulty lies in the distinction from any other religiously associated building. Here, the only mental connection of "visitors" is clearly linked to the image of death, while churches can be found as places of joyful moments too. Being not a simple architectural object, this building type is rather a duelist, complex machine with highly symbolic meaning. Here, where "you leave not the same, as you were while you entered" [3], everything needs to be decided, designed and planned from the beginning.

As a public space, crematoria stand today next to libraries, museums and train stations, floating towards the factory-like complexes. By avoiding the spiritual side of the problem, the modern type of crematorium lacks spatial qualities and fails to express the existential significance.

<sup>1</sup> VENTURI Robert, "Learning from Las Vegas: The forgotten symbolism of architectural form", MIT Press, 1972.

<sup>2</sup> HEATHCOTE, Edwin, "Monument builders: modern architecture and death", Academy Editions, Chichester, 1999, p.38

<sup>3</sup> JEANNERET, Jean-Daniel, "La crematoire de La Chaud-de-Fonds", Ville de la Chaud-de-Fonds, p.14

The complexity of spaces, functions and their interrelations still create an objective and a challenge for designers. The fact that building needs to embody the deepest human fears, leads to abandoning the authenticity of death and therefore hiding the real emotion. The functional, modernist language does not help to resolve still returning questions. Could the western type of crematorium inspire from the countries with longer experiences and higher emotional tolerance, without being again accidental and "artificial", like the ancestors?

#### a | Parts and functions

At first glance, a simplified diagram of functional relations in crematorium may appear as a relatively not complicated composition of spaces. In general, what could be defined as a rule, there is a public, accessible area and a "backstage" that can be seen and accessed only by selected users. The compound is usually formed by different areas for common use - like chapel, lobby, mourning rooms, waiting spaces, as well as more utilitarian ones - all technical and services, offices, preparatory rooms, places for urns and coffins and cold storage. Last, but not least, obviously one of the most imporant and one the most controversial - the furnace room.

In the architectural terms, a chapel can look familiar to a church and spatially imitate the same experiences. The use of elements like altars, organs or candles is rather typical, and the main space can be also supported by secondary, smaller niches for reflection and prayer. Often, there are also mourning chapels, that provide places for meditation and create much more intimate, private character. As introduced before, the practice of "passage building" can be also seen as the repetitive phenomenon, probably following the enigmatic example of Asplund's building at the Woodland Cemetery. It became in a way the contemporary definition of death related architecture, the icon that represented the burial reform and attempted to shape new rituals, with no less propaganda<sup>[1]</sup> and advertising than a new business center.

The recent addition to the Swedish cemetery made by Johan Celsing - "The stone in the forest", the New Crematorium (See  $F \mid 13$ ) has quite distinct character in comparison with the original construction. However, without making direct references it adopts the same "single object" expression. What is instantly evident is the position and relation of the chapel with the furnace room. The contemporary proposal contains the ceremony room that can accommodate up to eight people, whereas in Asplund's the main chapel has a significant role, connected to the main, iconic portico.

The same focus characterizes Henning Larsen's crematorium in Denmark, where the main idea is to make the center of the facility as large "oven area". Here, the ceremonial space is roughly the same size as the control room for stuff operating machinery.

<sup>1</sup> HEATHCOTE, Edwin, "Monument builders: modern architecture and death", Academy Editions, Chichester, 1999, p.78

If the wish was to make mourners watch the "procedure", than a small glazed corridor as a place of final act of respect, may not be sufficiently thought through. Following the same trail, the almost open space crematorium Aschwinikumar in India has also prominent crescent-like furnace chambers. There, every family is secluded from the outside and sits exactly in the place where the incineration happens.

This could probably be the example, where a direct adaptation of solutions from culturally different background is simply an arbitrary gesture[1]. In addition to the space of ovens, the important role of working and supporting areas is evident. Usually closed to the public, technical facilities require clean, sanitary and bright spaces. Moreover, all the facilities at this "side" of the building need to provide storage, usually with refrigerators and rooms that house before and after cremation procedures.

Here as well, there is a functional area with processors that transform bone fragments into fine grade ash. This backside area is often separate from the chapel and has its own access.

In case of Japanese architecture, the convention dictates that mourners witness the insertion of the coffin to the oven. [2] Nevertheless, crematoria are provided with so-called "farewell rooms", and additionally to the European ones, there are the "inurnment rooms", where traditional custom of picking bones out of the ashes is performed.

In general, there are several models to follow and building programme can be expressed in diverse ways. The inevitable division between the front and the back creates the tendency of placing all utilitarian parts at the facility in the underground. The stacking idea was applied by Asplund at the Woodland Asplund's Crematorium and the ritual is strictly separated from the prosaic machinery [3], while the recent trend is more to place everything under one roof, which does not always succeed.

Columbaria may also be the part of crematory complex, but the topic of ashes disposal is not entirely clear and can engage various solutions. In fact, after the complete ceremony, the urn with remains can be either buried, stored or ashes can be scattered in a desired location. Columbaria usually operate as small niches accessible for families, sometimes forming distinct structures or even alleys and buildings - like in Aldo Rossi's project. There is obviously nothing against merging cremation with traditional burial and instead of keeping the urn in the new type of mausoleum, it can be placed in a traditional grave.

<sup>1</sup> WILKINSON, Tom, "Typology: Crematorium", Architectural Review, Death, Issue No.1436, November 2016, p.59

<sup>2</sup> Ibid., p.62

<sup>3</sup> STEGERS, Rudolf, "Sacred buildings: a design manual", Birkhäuser, Basel, 2008, p.230

#### b | Promenade

The essential part of crematoria projects relies upon creating a meaningful and full of thoughts sequence to be experienced. The path needs to consider the trajectories to cross and things to be seen or hidden. There are certain distances to be made during the funeral ceremony and it is barely possible to perform all the stages of service at the same part of the burial location.

Depending on the ritual or its absence, the mourning conduct can take distinct destinations on the site.

What is the most important for the promenade is that the encounter at the crematorium should deal with emotional needs and do not provoke disagreeable atmosphere. The celebration starts with the arrival of mourners, usually directly to the chapel. Sometimes, in the case of "linear" functioning of crematorium, the services are held one after another, so that one family needs to wait if cannot use the chapel. If designed like that, the discomfort and sadness are experienced from the beginning. The proper ceremony is held then with the coffin of the deceased that is later on transported without funeral congregation. There are different methods, and all of them seem remarkably wrong. From high-tech lifts descending the body to mechanical belts moving it behind convertible screens - all of them make the final disappearance extremely unreal or even offensive [2].

The very significant moment of seeing the body buried, as enriching and emotional moment of human life in crematoria got replaced by a mechanical transfer to the "waiting room". This moving time of seeing someone close departing forever does not really take place, the ceremony normally ends as if nothing happened - the mourners leave uncertain, having left the dead in the lurch. According to Peter Bond, one of the problems is generated by those "committal chambers", where the coffin gets transferred from the ceremony to wait before entering to the furnaces. [4] The reason of getting the factory character is again the lack of real ceremony, which can last a couple of minutes and then more bodies are "queuing" to the much longer procedure of cremation.

The architect suggests that one opportunity could be to separate completely the chambers, where the chapel could get its own importance, the service could properly finish and the mourning conduct could leave to the open air.

<sup>1</sup> CURL, James Stevens, "A Celebration of death: an introduction to some of the buildings, monuments, and settings of funerary architecture in the Western European tradition", Constable, London, 1980, p.311

<sup>2</sup> Ibid., p.311

<sup>3</sup> Ibid., p.312

<sup>4</sup> BOND, Peter, "The celebration of death" in CURL, James Stevens, "A Celebration of death: an introduction to some of the buildings, monuments, and settings of funerary architecture in the Western European tradition", Constable, London, 1980, p.312

The procession would then follow the coffin to the ultimate point of promenade - "the real committal of the body to the flames, "I which would conclude the ceremony - however painful, that it should be faced" The importance of successively designed, different spaces is clearly visible in the Asplund's project, where the circulation and each stage is carefully planned.

From the entrance of the cemetery the large alley lead to the building. Approaching to the iconic portico, the conduct needs to pass by the expressionistic granite cross that regardless to the non-denominational character gives the pilgrimage path a symbolic value and a unusual atmosphere.

The crematorium itself is accessed through the main portico, from where the mourners can enter the small chapels or the main ceremony space. In the original, poetic concept, after the service was concluded, a huge glass screen would open up to bring the light and the woods to the mourners. However, when not in use, the idea of providing optimistic expression to the ritual cannot be accomplished.

A similar approach is presented by Celsing with the New Crematorium, hidden in the woods. Here, alike the other one, a funeral conduct accesses the building from the bricked canopy, where the light slot recalls to old building too. The reception area and all public parts are relatively small in proportion to the technical facilities on the same floor plan. This can be seen as the typological evolution from one side, and from the other as the sign of again changing attitude and ritual.

To tackle the problem of the room "in between", as suggested before, the separate volume composition may be one of the possibilities. In the Heimolen Crematorium completed by Kaan Architecten in Belgium (See  $F \mid 12$ ), the ceremony building and cremation facility are placed in two divided blocks, additionally separated by the lake. Here the procession is carefully planned and the route follows through choreographed succession of spaces. Again, starting with covering roof, the way leads to bright, overlooking the garden antechamber, to terminate in the main room with no windows. This approach tries to solve the programmatic issue of stacking by clear division, putting also an emphasis on a sacred feeling. Both building are public, even if one of them is purely utilitarian, it tries to provide a similar atmosphere as the other opposite side of the water basin. Nevertheless, the use of light and material, decoration and in a way a "sterileness" of this project could be seen as not entirely convincing for the modern crematorium building.

<sup>1</sup> BOND, Peter, "The celebration of death" in CURL, James Stevens, "A Celebration of death: an introduction to some of the buildings, monuments, and settings of funerary architecture in the Western European tradition", Constable, London, 1980, p.312

<sup>2</sup> Ibid., p.312

<sup>3</sup> WILKINSON, Tom, "Typology: Crematorium", Architectural Review, Death, Issue No.1436, November 2016, p.61

While the Japanese and Hindu traditions do not strictly separate the ritual and machinery, the path for the funeral congregation may differ as well. In the Hill of Winds Crematorium in Japan, low, hidden volume is made as sculptural complex of buildings, gardens and courtyards. As the procession proceeds, spaces open to the environment and try to blurry an inside with an outside. The courtyard serves not only as a source of light but also as a meditation place for mourners during the pauses between the rites. [1]

The architects pay close attention to dividing and reconnecting the spaces, as well as to general contrast of distinctive functions with geometries, proportions and materials. Providing a variety of moods, more bright and dark areas help to achieve the quality and reflexion during the physical and mental passage from stage to stage [2].

Similarly, the Ashwinikumar Crematorium, with its close to free and open relation to nature, respects the traditional beliefs and tries to enhance the spiritual experience during the ceremony. The private oven chambers are connected to the courtyard, while the whole building in more introverted and overlooks the river - a symbol of infinity and reincarnation. After the end of service, the relatives leave by coming down the ramp to the water to later climb back on the road, again metaphorically traversing the cycle of life.

#### c | Context

What seems to be often an irrelevant issue for some designers, the relation to the surroundings and building context cannot be omitted. This possibly the most important factor that contributes to the whole design is crucial and directly connected to the promenade and circulation of funeral conducts. The question where the building should be placed needs to be a departure point for the reflection. Many of the projects continuously search for the answer or sometimes cannot choose their position - whether to be a visible, screaming monument or a modest, minimal addition to the context.

The relationship within a cemetery complex needs to be clear and take a position towards the landscape. Referring to the ancient Greek temples, placed in the middle of sacred sites with sacral and mythological associations [3], the Woodland Crematorium rises above the Nordic forest and integrates itself into it. What brought fame to this project is the uncompromising mix of symbolism, functionalism and powerful control of the contemporary death landscape. Not far from the original construction, the New Crematorium of Johan Celsing touches down right in the middle of the woods, somewhat discreetly mirroring the old master.

<sup>1</sup> STEGERS, Rudolf, "Sacred buildings: a design manual", Birkhäuser, Basel, 2008, p.232

<sup>2</sup> Ibid., p.233

<sup>3</sup> HEATHCOTE, Edwin, "Monument builders: modern architecture and death", Academy Editions, Chichester, 1999, p.75

Both crematoria are thematically connected and at the same time they react to their closest environments. The brick block in accessed by the service road from the back, where coffins are delivered out of sight [1] and from the front, where the pathway is familiar to the Asplund's project. The same feeling of climbing up to reach to the "temple" can be experienced by the approaching mourners.

In the design for the Parma Crematorium (See F | 11), Paolo Zermani also referred to the ancient roots of sacred architecture. The landscape near Valera in Italy is historically characterized by the order of Roman colonization. In opposition to the previous examples, this building makes creates a visible and significant sign of his presence. Despite it may seem dominating or turning away from the site with continuous solid fence, it ambiguously fits there a makes a clear manifestation of a memory. This central building marks the zone within the landscape but also within its site, where it sits in the center of two axes, clearly defining hierarchy of spaces.

The strategical placement at the cemetery was chosen for one of the first crematoria in Switzerland, built in the progressive city of La Chaud-de-Fonds. Occupying the site right next to the entrance, but turned with the back facade towards it, the building becomes a temple that welcomes and accompanies the mourners. Here, after the funeral service, the congregation needs to take the large staircase and turn back to the catafalque, to later make one more turn and reach the path alongside the crematorium. [2]

Regardless of many fundamental discrepancies, designs related to the Hindu traditions carefully treat the context they need to answer. In Ashwinikumar by Matharoo Associates, the first gesture was to clearly express building's identity in the urban setting. Alike the project in Italy, the Indian crematorium creates its own, a little isolated atmosphere with auxiliary functions set in front to create a barrier from the existing structures. This allowed to emphasize the natural setting and underline its symbolical aspect.

#### c | Structure and material

Sacred spaces express their metaphysical character through the structure and material that thanks to the role of light are enabled to interact with users. This direct relation comes from the fact that we unconsciously make the instant impression about the space by seeing or touching it. The concept of the "ineffable space" is tightly connected with the use of concrete that allowed Le Corbusier to express his fascination. There would not be the Notre Dame in Ronchamp without raw concrete and cement cannons. [3]

<sup>1</sup> WOODMAN, Ellis, "Stone in the forest", Architectural Review, Issue No. 1408, June 2014, p.57-62

<sup>2</sup> JEANNERET, Jean-Daniel, "La crematoire de La Chaud-de-Fonds", Ville de la Chaud-de-Fonds, Service d'Urbanisme, p.14

<sup>3</sup> GARGIANI, Roberto, ROSSELLINI Anna, "Le Corbusier: Beton Brut and Ineffable Space 1940 – 1965", EPFL Press, Lausanne, 2011, p.71

This modernist experimentation in order to reach the sacred and religious space brought the exploration of structural language and new materiality. Economizing ways of expression, like in St. Antonius Kirke by Karol Moser or St. Mary Cathedral by Kenzo Tange puts the focus on pure shapes, construction and coming from them symbolism. Powerful spaces have to seek congruence between structure, material and atmosphere.

In the case of crematoria, the very sensible problem of metaphysical space can easily become the main weakness through the use of inappropriate materials. Brutalist exposed concrete in spaces for the emotional moment of departure can only contribute to the spatial discomfort, together with movable coffin platforms and other "innovations".

All of the analyzed projects pay special attention to the materiality and manifest their characters by different means. Johan's Celsing building is not only carefully placed in the forest but also reacts to it with its appearance. Abandoning the theatrical trappings like in many funeral buildings, the walls are left untreated with rough, dark bricks that merge with the landscape and join the chapel and cremation areas. [1]

Referring to the Scandinavian traditions, brick's honesty perfectly fits to the whole concept and in some way reflects its use. In this project, the blocks are longer that usual format and the proportion of mortar is higher in order to reinforce the connection to the pine barks. Those trees form the natural frames for the views, both from inside and outside. Like in the works of Nyberg and Lewerntz, the architects tried to achieve a renewed reality within the condition of the building by an ordinary brick.

The project in Belgium with its separate but "communicating" volumes tries to use mainly robust materials and do not emanate with exaggerated details. To enhance the experience during the ceremonial succession of rooms, clear concrete reflects the light in contrast to the large shadowing canopy. In the furnaces part the architects decided not to express the presence of the crematorium chimney, aiming for more abstraction.

There are obviously strong dilemmas, whether architecture should manifest its function at all. In this case, the authors try to stay precise, pathetic and honest, creating a little mystery around the building. Yet, from one point of view, the clean, disciplined box gets window perforations that recall Frank Lloyd Wright's early experiments with concrete, [2] being only added decorations.

<sup>1</sup> SHIPWRIGHT, Fiona, "The New Crematorium", Uncube Magazine, Death, Issue No. 38, November 2015

<sup>2</sup> CONSTRUIRE en béton, "Revue d'architecture 2010/2011. Examples internationaux de l'art de construire en béton", BetonSuisse, Bern, 2010, p.22

Another way of spatial articulation is exercised by Fumihiko Maki in the Japanese project. The structure here embodies the surroundings and integrates strange geometrical composition into the ground. All the elements of the complex attempt to live their independent rhythm and are treated with different materials like concrete, corten steel, and grey coloured bricks. Despite the general diversity, an important feature is that all the spaces with more meditative nature are contrasted with the waiting, relief area - lighter, warmer, more open and calm. [1]

As underlined before, the extensive use of exposed concrete might carry the substantial risk of building a unreal, inhuman failure. However, in Ashwinikumar, which seems to be an enormous poured in place concrete sculpture, the experience is exactly opposite. Here again, the materiality or rather its absence, creates the magnificence of traditional ritual and a deep emotional sensation.

 $<sup>1\ \</sup> STEGERS, Rudolf, "Sacred buildings: a design manual", Birkhäuser, Basel, 2008, p.232$ 



# 5 | Moment to come

## 5.1 | Alternative ritual, swiss situation

Cremation changed the funeral ceremonies and it is still in conquer of more and more terrains. It influenced the rituals and we could say that it transforms, if not revolutionizes religion too. A growing interest in this practice creates a significant spatial implication and the fact that the traditional form of the cemetery is theoretically no longer needed. If incineration completely take over as the only form of burial - which is very likely to happen - the only reason why we will construct any commemorating related structures will come from the cultural demand.

Dying and death are still taboos in the western society and with the modern cremation approach became slowly drifting towards objectified and pragmatic events. However, the cultural legacy somewhat imposes the need of giving respect to the deceased. The human position towards death happen to suddenly change while facing it personally. The rituals that accompany the event of loss represent culture of society, but also create a system of help to understand and overcome pain. Today, when we do not want to see the dead body anymore, the rituals evidently change [1]. They sometimes become completely secular and economically practical or more "exotic", feeding natural human curiosity.

The raise of new practices, especially with the development of technology can lead to the complete disappearance of symbols and monuments. Life transforms, but death persists and rituals continue to be generated and to cause more questions. New approaches and alternatives are born from the spatial and mental crisis, where death is commonly rejected. It is hard to admit that the traditions vanish, but nevertheless they become a phenomenon put into challenge. Do they still keep any precise meaning and importance or they start to be only a part of commercial and business sphere?

From one side, the contemporary and effective face of cremation takes an image of nothing but an industrial process. On the other hand, new practises that gain importance in people's mind, clearly refer to the symbolism of purifying fire and symbiosis with nature. The more and more popular are open-air burials, scattering of ashes and many other ways of "funerals". New technologies, globalization, economy and pro-ecological movements may contribute to the alternative directions for final farewell. Accordingly, the rites need to adapt to the current needs and therefore create sometimes a new kind of symbolism.

Cremation allowed the arrival of new techniques and burial methods, widening the range of possibilities. Paradoxically, what could seem to be irrelevant for someone that is already dead, the demand at the "death market" is very vital.

<sup>1</sup> OCHSENBEIN, Gaby, "Human ashes litter Swiss countryside", URL: http://www.swissinfo.ch/eng/human-ashes-litter-swiss-countryside/30534188 [05.12.2016]

Together with biodegradable coffins, specialized urns and sustainable materials, new trends of environmentally friendly processes come to the public sight [1]. Natural burials of unembalmed bodies with temporary, "green" memorials present interesting opportunities for those who do not want to contribute to the world's pollution. Natural cemeteries somewhere up in the woods require less regulations, funds and acceptance. They challenge not only cremation but all funeral practices that we know from the past [2].

The more radical proposals that are still in development phases and they span from diamonds, jewellery or tableware production. It may seem ridiculous, but the rule seems to be that if you put something on the market, you will sell it. Moreover, in the contemporary era of the Internet, ideas about virtual memorials are not missing either. Why would someone need a tomb, if his friends and family can build his interactive, audio-visual, flashy funpage?

Nevertheless, those practices are still a minor phenomenon. The recently more popular habit of scattering the ashes gets the attention from both religious and laic parts of society. In some way, it started to push cemetery with its classical function to the shadows. This given freedom of choices is likely to contribute to the "new spirituality". Traditional church services have no longer the monopoly of rites of passage [3] because of growing number of people that do not agree with them. Yet, the majority still feels the need of ritual, whether connected to their church with presence of a priest, or a laic one conducted by a celebrant. [4]

In the countries where scattering the ashes is allowed, people willingly choose to do it and in Switzerland the rate is around 20% of all incineration [5]. As in a multicultural country, the evolution of beliefs and rituals is natural. Some Shinto and Buddhist communities can already practice their funerals with traditional dispersing the remains into Swiss rivers. However romantic or symbolical the celebration may be, it has extremely important spatial and economical implications.

The creation of "forest cemeteries" where trees adopt the role of tombs, changes the perception not only on the cemetery itself but on the entire landscape. If someone chooses to have his cremains spreaded with the wind to a forest or over a glacier, they become his "land memorial". Taking a step further, this impacts the general idea of tourism, where to visit someone's grave, his relatives go on meditation holidays.

<sup>1</sup> WORPOLE, Ken, "Housing the dead", Architectural Review, Death, Issue No. 1436, November 2016, p.7

<sup>2</sup> Ibid., p.8

<sup>3</sup> GIGON, Ariane, "La Suisse, havre de nouveaux rites funéraires", URL: http://www.swissinfo.ch/fre/croyances\_lasuisse--havre-de--nouveaux--ritesfun%C3%A9raires/33125898 [15.11.2016]

<sup>4</sup> Ibid.

<sup>5</sup> Ibid.

Another significant issue of changing times is linked to the tradition of collective grave. For diverse economical or ideological reasons and thanks to popularity of cremation, many communities decide to have a common urn. For some, it can become a gesture of manifestation that death and tomb lost significance. On the opposite side, others may find it as a superior act of collective memory and affiliation to the closest society.

Situation in Switzerland as one of the leading nations in terms of cremation culture is also particular. The country that belonged to the pioneers of the idea is today a champion in the field. According to the statistics from 2013, around 89% of Swiss citizens chose to be incinerated, with the highest rank in Europe [1]. In general, during last decades number of this kind of funeral increased almost equally in the entire country, also in the catholic cantons where the actual rate is around two thousand funerals per year [2].

According to the National Research Program on Religious Communities, today's religious image is still principally composed by Christians. In 2010, around 40% of population declared the Roman Catholic Church, 30% the Reformed Evangelical Church and 20% no religious affiliation<sup>[3]</sup>. Swiss society known as very pragmatic and precise probably sees the advantages of cremation, rather than looks for counter arguments. On the other hand, an important part of interviewed mentions that they are simply scared of traditional burial reality<sup>[4]</sup>. The image of the dead body in the coffin covered by soil may sometimes by much more terrifying than the vision of 'purifying flames'.

Taking the example of the canton of Valais, considered as one of the Catholic areas, the reality of funerals is more complex than can be initially assumed. In fact, the relation of classic services to cremation varies depending on each municipality. Some villages can fully support only conventional methods, where the other, 100% Catholic areas characterize almost complete turn towards incineration. [5]

All those actions provoke the meaningful phenomenon when considering cemetery spaces. With the abandoning of traditional burials, a necropolis of death monuments becomes much more a green space with punctual small memorials than a "dead city" it used to have.

<sup>1</sup> ROULET, Francois, "La Suisse est la championne en Europe du taux de crémations", URL: http://www.rts.ch/info/suisse/7706904-la-suisse-est-la-championne-en-europe-dutaux-de-cremations.html [29.11.2016]

<sup>2</sup> Ibid

<sup>3</sup> GIGON, Ariane, "La Suisse, havre de nouveaux rites funéraires", URL: http://www.swissinfo.ch/fre/croyances\_lasuisse--havre-de--nouveaux--ritesfun%C3%A9raires/33125898 [15.11.2016]

<sup>4</sup> Ibid.

<sup>5</sup> Ibid.

## 5.2 | New possibilities

There is undoubtedly a potential to explore in the domain of crematorium typology. The opportunities given by the changes in society from the XX century were unfortunately to the large extent missed. Contemporary results with few exceptions often lack remarkable spatial qualities. This building type with roughly hundred years of history is still forming its identity, together with ever changing rituals and processes that follow.

The reasons behind this situation are diverse. Firstly, the radical movements of secularization cause the dominance of functionalism over the spiritual aspect. The profane side of the building takes advantage on the sacred, which is sometimes utterly neglected. Moreover, there is also a fundamental issue of urban relations and public spaces, where crematoria did not elaborate any clear strategy.

Incineration sites are often located next to mortuaries or alternatively at the cemetery. Yet, until now the image that is associated with a crematorium is much more utilitarian than symbolic and emotional. Its role in the modern city needs to be challenged. The development of crematorium building in urban space gives an opportunity to create new conditions. It could produce new social relations and different cultural values for life and death [2].

Mortuary is in general the industry like many others. Funeral services and crematoria work in the sensible field, but still operate to meet "client's" preferences. The flexibility of rituals offered by contemporary market comes strictly from the "postmodern mentality, characterized by acceptance and celebration of individual idiosyncrasies" [3]. With the social and religious progression, the typology evolved together with a variety of purpose-built constructions. Crematorium as a building can have this extremely meaningful and strong force of affecting individual consciousness through the public reaction.

Today's main feature of crematora is evidently influenced by religious pluralism and the shared use of facilities, which may be another reason of problematic situation. The social factors and globalization contributed to the evolution of building type from the XX century, in which hosting ceremonies for many religions or non-ideological services would have been impossible. The question is now if those factors are after all beneficial for the architecture or in the contrary they provoked defects. Together with a strong devotion to the functionality, secular growth and not very evident spiritually-rooted link, buildings might quickly fail.

<sup>1</sup> DAVIES, Douglas J., MATES, Lewis H., "Encyclopedia of Cremation", Ashgate, Aldershot, 2005, p.92

<sup>2</sup> Ibid., p.25

<sup>3</sup> Ibid., p.32

<sup>4</sup> Ibid., p.25

The re-evaluation of current trends and a step back in reflection seems to be crucial in the search for an architectural answer. Reintroducing and reinventing of a model cremation ritual could be one way to address this problem.

A new type of building could not only recreate the public view on death but also have its impact directly on practice of cremation and on religion. The fundamental issues like attitude to the body, participation of one's family, perception of afterlife and its meaning - all need to be articulated to overcome the difficulties from the past.

This important dimension could affect not only the city but also the region and possibly even larger national territory. Learning from the local context, Switzerland is one of the cremation "leaders" with still substantial number of Christians. It is assumed that the role of religion is in decline and gets more individual attitudes towards it. Yet, in the face of death, frequently even the most nonreligious person turns back to the unconsciously followed faith, as if it was "eclipsed in the darkness of their unconscious - which means too that in such men the possibility of reintegrating a religious vision of life lies at a great depth".[1]

Does then crematorium need to be pluralist building with absolutely no symbolism? Would it be possible to imagine a Temple of Cremation as the new architectural typology? In the case of Christianity, where most of denominations accept cremation, it could be used as an opportunity to seek for the best kind of space to the particular funeral rite. Moreover, in the light of ecumenical movements, a common place of worship for Christians could contribute to their unity. Considering the Catholic community, the recently published document by Vatican demonstrates still a strong opposition towards the practice of ashes dispersion [2]. At the same time, collective urns are accepted.

Would it be possible that the whole building site could be considered as a sacred place? Could then the entire "center" become an invisible memorial of life? This collective memory requires a certain distance and acceptance of the individual. However, as described in the previous chapters, the openness and new trends influence also the most conservative Catholics which leads to more adaptations. This aspect could be possibly tested in the capital of the canton of Valais, extraordrinarily located - Sion (See  $F \mid 14$ ).

<sup>1</sup> ELIADE, Mircea, "The sacred and the profane, The nature of religion", Harcourt Brace Jovanovich, San Diego, 1987, p.213

<sup>2</sup> WOODEN Cindy, "Final resting place: Vatican releases instruction on burial, cremation", URL: https://www.ncronline.org/news/vatican/final-resting-place-vatican-releasesinstruction-burial-cremation [02.11.2016]

With over 70% of population associated with the Catholic Church [1], the possible new type of crematorium could substantially affect the sacred, and the profane life in this part of Switzerland. Finally, both the Church and the cremation practices could profit from new the image brought by emerging opportunity.

Nevertheless, is there any right way to approach death after all? Is it possible to find a positive or promising aspect at the time full of grief and sadness? It seems the most appropriate to mention again Peter Bond's explanation, that "however painful it is, it should be faced". [2] According to the Christian belief, the only hope and remedy is in God and the forthcoming resurrection.

<sup>1</sup> EVEQUES, Conference des eveques suisses, "Statistiques de l'Eglise catholique en Suisse", URL: http://www.eveques.ch/nous/suisse/statistiques [10.12.2016]

<sup>2</sup> BOND, Peter, "The celebration of death" in CURL, James Stevens, "A Celebration of death: an introduction to some of the buildings, monuments, and settings of funerary architecture in the Western European tradition", Constable, London, 1980, p.312



# 6 | Conclusion

## Encounters at the End of the Time

If there is a beauty in the struggle, all architects are in the search of their own sense of its individual interpretation. Having a difficult task to accomplish since ages we attempt to construct the ineffable. Architects are lunatics with high aspirations, with a need to change the world, to invent and to continuously challenge themselves. To succeed in building sacred architecture as a very sensitive part of the domain is an astronomical goal. How to construct the mystery without being trivial at the same time? What should be a response to the rapidly changing needs of today's form of spirituality?

The theory where religion will keep its position in the society but will take a very much individual track, seems possible in the future to come. It would become almost invisible in daily life, but still persistent. If this happens, its new form will be different than in the past and almost contradictory to the collective denomination shared by given society.

What cannot be forgotten is the simple fact that architecture should not only be for people, but about people. If a community and its collective legacy is the most important for an individual, then also architects should have this as a fundamental value. The challenge then would be to meet the spiritual needs, to put in plastic form something that cannot be conceptually described. At the same time, buildings have to reflect the current cultural, economical and urban conditions.

The multidimensional dialogue between number of domains is a crucial element of architectural process that often gets the inferior attention. In the end, after facing all the difficulties, architect's primary assignment is to create a space - "which is at the core of our discipline, is often forgotten, ignored or simply lost" [2].

This analysis of theories related to the sacred and architectural solutions, presents that the problem of today's view on the topic is often insufficient or intentionally set back from the actual discussion. The contemporary attitude towards death tending to deny the mortality is indeed a more complex issue.

With the rise of new rituals and popularization of practices different than traditional, architecture needs to redefine its position. Once the cemeteries stopped to form "the sacred and immortal heart of the city, but the other city, where each family possesses its dark resting place" [3].

<sup>1</sup> CAVARRA, Britton, Karla, "Constructing the ineffable. Contemporary sacred architecture", Yale School of Architecture, New Haven, 2010, p.133

<sup>2</sup> ZUBER, Raphael, "Spaces", Exhibition at the Bienalle Architettura di Venezia 2016, URL: https://divisare.com/projects/326359-raphael-zuber-raphael-zuber-exhibits-at-15thvenice-biennale [10.11.2016]

<sup>3</sup> FOUCAULT, Michel, "Of Other Spaces: Utopias and Heterotopias", from Architecture, Mouvement, Continuité, accessed on URL: http://web.mit.edu/allanmc/www/foucault1.pdf [29.12.2016]

Nowadays, trying to take a certain risk and confronting the urban and architectural designs with "post-secular" reality [1], can certainly enrich the still important part of architectural discipline.

Constructing new sacred spaces and religious buildings can contribute to the valuable academic discourse and regain its place in public realm. The specific case of crematoria can be seen as an again opened field of experimentation. Thanks to the religious evolution and openness, architecture could take the given chance and try to find a better way to understand death.

The heading "Encounters at the End of the Time" that announces the forthcoming design is deliberately reminiscent of Werner Herzog's production from 2007. The documentary image about people, landscape and eternity has a significant philosophical meaning. In the human outposts of Antarctica (See F  $\mid$  15), Herzog finds people that by their curiosity and oddness were attracted by the edge of existence.

The place where the world ends, where all the lines of the map converge, selects only those who intend to "jump off the margin of the map". [2] This strange need of finding the different reality, the origin, is exactly like departing for the ultimate journey. The Temple of Cremation as a symbolic axis and connection, works as a gate to the undiscovered, as a path to the new Pole.

<sup>1</sup> HABERMAS, Jurgen, "The Resurgence of Religion: A Challenge to the Secular Self-Understanding of Modernity", in CAVARRA, Britton, Karla, "Constructing the ineffable. Contemporary sacred architecture", Yale School of Architecture, New Haven, 2010, p.9

<sup>2</sup> HERZOG, Werner, "Encounters At The End Of The World", 2007 URL: https://youtu.be/7edsEUQB-J8 [09.08.2016]



# 7 | Bibliography

#### Books

AUZELLE, Robert, "Dernières demeures conception, composition, réalisation du cimetière contemporain", Editions Presses Imprimerie Mazarine, Paris, 1965

ALOI, Roberto, "Architettura funeraria moderna: architettura monumentale: crematori - cimiteri - edicole - cappelle - tombe - stele - decorazione", Hoepli, Milano, 1953

CAVARRA, Britton, Karla, "Constructing the ineffable. Contemporary sacred architecture", Yale School of Architecture, New Haven, 2010

COLVIN, Howard Montagu, "Architecture and the after-life", Yale University Press, New Haven, 1991

CURL, James Stevens, "A Celebration of death: an introduction to some of the buildings, monuments, and settings of funerary architecture in the Western European tradition", Constable, London, 1980

DAVIES, Douglas J., MATES, Lewis H., "Encyclopedia of Cremation", Ashgate, Aldershot, 2005

ELIADE, Mircea, "The sacred and the profane, The nature of religion", Harcourt Brace Jovanovich, San Diego, 1987

ETLIN, Richard A., "The architecture of death the transformation of the cemetery in eighteenth-century Paris", MIT Press, Cambridge 1984

GARGIANI, Roberto, ROSSELLINI Anna, "Le Corbusier: Beton Brut and Ineffable Space 1940 – 1965", EPFL Press, Lausanne, 2011

HEATHCOTE, Edwin, "Monument builders: modern architecture and death", Academy Editions, Chichester, 1999

PALLISTER, James, "Sacred Spaces: contemporary religious architecture", Phaidon, London 2015

RAGON, Michel, "L'espace de la mort essai sur l'architecture, la décoration et l'urbanisme funéraires", Michel, Paris, 1981

STEGERS, Rudolf, "Sacred buildings: a design manual", Birkhäuser, Basel, 2008

THOMAS Louis-Vincent, "Rites de mort : pour la paix des vivants", Fayard, Paris, 1996

VOVELLE, Michel, "La ville des morts essai sur l'imaginaire urbain contemporain d'après les cimetières provençaux", Editions du Centre National de la Recherche Scientifique, Paris, 1983

ZEMP, Ivo, "Die Architektur der Feuerbestattung eine Kulturgeschichte der Schweizer Krematorien", hier+jetzt, Baden, 2012

ZUMTHOR, Peter, "Atmospheres architectural environments - surrounding objects", Birkhäuser, Basel, 2006

## Publications in magazines:

CARUSO, Adam, "Sigurd Lewerentz and a Material Basis for Form", OASE Amsterdam, January 1997, Issue 45/46, pp. 88-95

CIESIELSKA, Joanna A., "Obrzadek ciałopalny w tradycji starozytnej i współczesnej Japonii", Antropologia Religii V (2013), pp. 48-55

GYURKOVICH, Jacek, "Sacral architecture - contemporary tendeances in western church", Przestrzen i forma N.18, Warszawa, 2012

JONES, David W., "To bury or burn? Toward an ethic of cremation", JETS 52/2, June 2010

SHIPWRIGHT, Fiona, "The New Crematorium", Uncube Magazine, Death, Issue No. 38, November 2015

VIDLER, Anthony, "Reputation. Louis-Étienne Boullée", Architectural Review, Tombs, Issue No. 1436, November 2016, p.51-53

WILKINSON, Tom, "Typology: Crematorium", Architectural Review, Death, Issue No. 1436, November 2016, p.54-62

WILKINSON, Tom, "Typology: Tombs", Architectural Review, Tombs, Issue No. 1423, September 2015

WOODMAN, Ellis, "Stone in the forest", Architectural Review, Issue No. 1408, June 2014, p.57-62

WORPOLE, Ken, "Housing the dead", Architectural Review, Death, Issue No. 1436, November 2016

WRIGHT, Herbert, "The great beyond. Architectures of the Afterlife". Uncube Magazine, Death, Issue No. 38, November 2015

## Other documents:

CONSTRUIRE en béton, "Revue d'architecture 2010/2011. Examples internationaux de l'art de construire en béton", BetonSuisse, Bern, 2010

MILLER, Atelier di progettazione Professore Arch. Quintus Miller, "Cimitero", Colophon, Universita della Svizzera italiana, Accademia di Architettura di Mendrisio, 2016.

VILLE de Lausanne, "La mort dans tous ses états" - Exposition des Pompes funèbres officielles au Forum de l'Hôtel de Ville, le 4 octobre 2016.

URL:http://www.lausanne.ch/lausanne-officielle/administration/securite-et-economie/service-de-protection-et-sauvetage/pompes-funebres-officielles.html [14.10.2016]

#### Online materials:

BOULLÉE, Etienne-Louis, "Architecture, Essay on Art". Edited and annotated by Helen Rosenau. Translated by Sheila da Vallée.

URL: http://designspeculum.com/Historyweb/boulleetreatise.pdf [02.01.2017]

CATHOLIC, Cemeteries & Funeral Services, "Catholics and Cremation", URL: http://www.catholic-cemeteries.com/Catholics\_and\_Cremation\_1189720.html [02.12.2016]

CORNET, de Simone, Geneviève, "Eglise: de la condamnation à la tolérance", Echo Magazine URL:http://www.echomagazine.ch/archives/articles-2014/19-a-la-une/679-cremation [30.10.2016]

ENG, Karen, "Design for dying: A TED Fellow thinks deeply about the architecture of death" URL: http://blog.ted.com/the-architecture-of-death-ted-fellow-alison-killing-rethinks-design-for-the-dying/[11.11.2016]

EVEQUES, Conference des eveques suisses, "Statistiques de l'Eglise catholique en Suisse", URL: http://www.eveques.ch/nous/suisse/statistiques [10.12.2016]

FOUCAULT, Michel, "Of Other Spaces: Utopias and Heterotopias", from Architecture, Mouvement, Continuité, accessed on URL: http://web.mit.edu/allanmc/www/foucault1.pdf [29.12.2016]

GIGON, Ariane, "La Suisse, havre de nouveaux rites funéraires", URL: http://www.swissinfo.ch/fre/croyances\_la-suisse--havre-de--nouveaux--rites-fun%C3%A9raires/33125898 [15.11.2016]

HALL, Matthew, "Klockarebackens Funeral Chapel", http://hicarquitectura.com/2017/01/bernt-nyberg-klockarebackens-funeral-chapel-hoor-sweden/[06.12.2016]

HERZOG, Werner, "Encounters At The End Of The World", 2007 URL: https://youtu.be/7edsEUQB-J8 [09.08.2016]

JEANNERET, Jean-Daniel, "La crematoire de La Chaud-de-Fonds", Ville de la Chaud-de-Fonds, Service d'Urbanisme, URL: http://www.chaux-de-fonds.ch/demarches-officielles/cimetiere-et-centre-funeraire [27.02.2016]

KILLING, Allison, "There's a better way to die, and architecture can help", TED conference, URL: https://www.ted.com/talks/alison\_killing\_there\_s\_a\_better\_way\_to\_die\_and\_architecture\_can\_help [20.09.2016]

MERTES, Jenny, "Christian funeral service rituals", URL: https://www.funeralwise.com/customs/christian\_overview/ [01.12.2016] OCHSENBEIN, Gaby, "Human ashes litter Swiss countryside", URL: http://www.swissinfo.ch/eng/human-ashes-litter-swiss-countryside/30534188 [05.12.2016]

READNOWER, Cindy, "Jewish funeral traditions keep heritage alive", URL:http://blog.everlastingfootprint.com/2015/05/19/jewish-funeral-traditions/[01.12.2016]

ROULET, Francois, "La Suisse est la championne en Europe du taux de crémations", URL: http://www.rts.ch/info/suisse/7706904-la-suisse-est-la-championne-en-europe-du-taux-de-cremations.html [29.11.2016]

SAIEH, Nico, "Multiplicity and Memory: Talking About Architecture with Peter Zumthor" URL: http://www.archdaily.com/85656/multiplicity-and-memory-talking-about-architecture-with-peter-zumthor [06.09.2016]

WOODEN Cindy, "Final resting place: Vatican releases instruction on burial, cremation", URL: https://www.ncronline.org/news/vatican/final-resting-place-vatican-releases-instruction-burial-cremation [02.11.2016]

ZUBER, Raphael, "Spaces", Exhibition at the Bienalle Architettura di Venezia 2016, URL: https://divisare.com/projects/326359-raphael-zuber-raphael-zuber-exhibits-at-15th-venice-biennale [10.11.2016]

# List of figures:

| F   1  | Introductory image - art installation, Luciano Scherer https://www.flickr.com/photos/incrivel/               |
|--------|--|
| F   2  | Calvary Cemetery in New York   |
| '      | https://theancientsportswriter.files.wordpress.com/2014/08/kosciusko-view-4.jpg                              |
| F   3  | Whirpool Galaxy, NASA  |
| '      | http://imgsrc.hubblesite.org/hu/db/images/hs-2001-10-a-full_jpg.jpg  |
| F   4  | Thanksgiving Chapel, Philip Johnson  |
|        | https://en.wikiquote.org/wiki/Mircea_Eliade#/media/File:Thanksgiving_chapel_interior.jpg                     |
| F   5  | Nautilus Spiral  |
|        | https://en.wikiquote.org/wiki/Mircea_Eliade#/media/File:NautilusCutawayLogarithmicSpiral.jpg                 |
| F   6  | Notre Dame de Ronchamp, Le Corbusier   |
|        | https://fbcdn-sphotos-f-a.akamaihd.net/hphotos-ak-frc3/t31/976192_62018614539_1454917263_0.jpg               |
| F   7  | St. Peter's Basilica in Rome   |
|        | Author's photograph, Rome, 2016.   |
| F   8  | Funeral ceremony, Basilica of the National Shrine of the Immaculate Conception                               |
|        | http://www.post-gazette.com/image/2016/02/20/ca0,0,5000,3351/511410778crp.jpg                                |
| F   9  | Klockarebackens Kapell, Bernt Nyberg   |
|        | http://hicarquitectura.com/2017/01/bernt-nyberg-klockarebackens-funeral-chapel-hoor-sweden/                  |
| F   10 | Resurrection Chapel, Sigurd Lewerentz  |
|        | http://skogskyrkogarden.stockholm.se/in-english/architecture/huildings/chapel-of-resurrection/               |
| F   11 | Crematorium in Parma, Paolo Zermani  |
|        | http://divisare.com/projects/259055-zermani-e-associati-mauro-davoli-tempio-di-cremazione                    |
| F   12 | Crematorium Heimolen, Kaan Architecten   |
|        | http://divisare.com/projects/123301-kaan-architecten-sebastian-van-damme-christian-richters-crematorium-     |
|        | heimolen   |
| F   13 | Crematorium at Woodland Cemetery, Johan Celsing  |
|        | http://divisare.com/projects/268719-johan-celsing-arkitektkontor-ioana-marinescu-the-new-crematorium-at-the- |
|        | woodland-cemetery  |
| F   14 | Ville de Sion panorama   |
|        | https://www.flickr.com/photos/kerr_at_large/   |
| F   15 | Antarctica, Werner Herzog  |
|        | http://collider.com/new-images-from-werner-herzogs-encounters-at-the-end-of-the-world/                       |

