

Evolution and particularities of the SPA programme

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ABSTRACT

The study aims to contribute to the topic of contemporary Spa design. The main objective is to explore, analyze and use a plastic vocabulary capable to heighten the symbolic properties of water and light. A short historical overview of the development of the Spa architectural programme is followed by the case study analysis, which emphasizes the importance of setting for the outcome of the design solution. The personal contribution is consistent with the stated objective and centers specifically on the issues raised by the design of a Spa facility into an existing building located within a restaurant, indoor entertainment and sport complex. The main challenge, other than the constraints of solving the functional flows, proved to be the management of natural light and the dialogue interior exterior. The conclusions of the study show that a contemporary Spa could be fitted into an existing building and that a design concept is enriched by the use of a plastic vocabulary drawn from the symbolism of light and water.

Keywords: spa, water, context, light, symbolic

I. INTRODUCTION

The term Spa, used mainly in the English speaking countries, is the abbreviation of the Latin syntagma sanitas per aquam (health through water). Another origin of the term could be traced to the town of Spa [1], Belgium, famous throughout the world for its healing cold springs since the XIV-th century.

The Spa programme covers a wide set of services, ranging from thermalism, talassotherapy or balneary treatments such as massage, hydro massage, algae body wrap, etc. The functional solutions could generate independent buildings or could be integrated in hotels, resorts or commercial buildings [2].

The body of knowledge acquired in time about the curative properties of water and man's deep seeded faith in water's healing power, led to the use of the first mineral and thermal springs, probably with makeshift facilities. The evolution of human communities was paralleled by the evolution of the programme, from the early primitive facilities to more functional buildings, leading to the complex architectural programmes such as public baths and thermae. The history of Spas, as defined by the programme today, is relatively recent, conversely the elements common to those of the public baths or thermae date back to antiquity and can be found in many cultures worldwide.

In the beginning, the paper makes a short overview of the historical evolution of the programme, from the public baths and the thermae of Roman antiquity to the balneary facilities of XIX-th century Europe. The following case study analysis presents various ways of addressing the programme, in accordance with the specific functional requirements of the historical periods.

The topic is then developed into two main directions: on one side, the comparative analysis of the functional aspects of the selected cases, on the other the analysis of the use of natural light in conjunction with the presence of water, seen as spring, surface, cascade, etc.. The personal contribution consists in the analysis of a project developed by the author, in which, the design solution, focused both on the functional aspects and on the search for a visual language meant to express the symbolic qualities of water and light.

The conclusions of the study prove that the programme can be functionally adapted to a given space and that a contemporary plastic language becomes richer when it expresses the symbolic qualities of water and light.

II. 2 SHORT HISTORIC OVERVIEW OF EUROPEAN PUBLIC BATHS, THERMAE AND SPAS

II.1 Classical antiquity

The ancient Greeks laid the foundations of European civilization. Interested in science, medicine, education and sport, they defined the programme of public baths and thermae. Used initially for body cleansing, the thermal waters were gradually considered to be beneficial for health equilibrium and disease prevention, together with massage treatments and physical exercises.

The Romans were greatly influenced by the superior Greek culture and they adopted quite a few Greek lifestyle features such as the public baths and the thermae. During the Classical Antiquity thermal water bathing was generally thought to be a beneficial treatment for various diseases [3]. The Roman genius for building and organizing led to the refinement and extension of the Greek programme. The military presence was often the key factor for the development of such resorts which could be assimilated to the contemporary Spa [4]. Military readiness for the troops required the best physical shape, therefore periods of rest and therapy were common practice.

As a result, numerous thermal baths were erected throughout the Roman Empire, following the path of conquests and the founding of new cities. The availability of fresh drinking water (through aqueducts) in the cities, allowed the further development of the public baths and thermae, into larger buildings with complex functions built, for the needs of thousands of people (e.g.: Thermae of Caracalla, Diocletian, Forum Pompeii, Herculaneum). Hence, the Romans refined the programme, adding a new function to bathing, other than cleansing, and introducing the art of large scale socializing. Eventually the practice of bathing and socializing was adopted and became traditional in the

Orient, under a new name – the hammam.

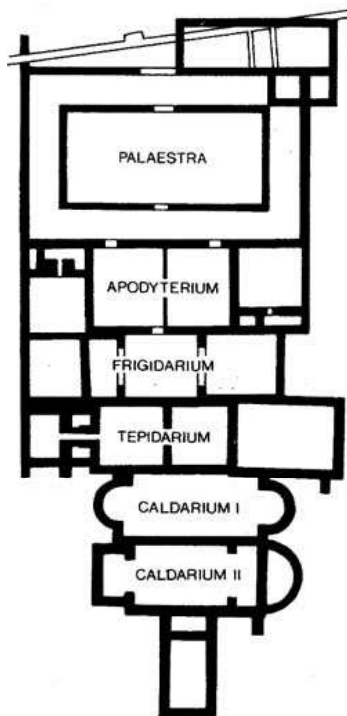


Fig. 1. Plan of a roman public bath [3]

II.2 The middle ages

„The advent of Christianity and the christening of Medieval Europe, after the fall of the Roman Empire, led to the decline of public bathing which was even prohibited at times.” [5] Religion and prayer were valued higher than the healing properties of water.

It must be said as well that the water quality as sanitation in the cities were very poor. “People refrained from taking a bath, at times for years.” [5]

II.3 The renaissance

A time of momentous changes in the history of Europe saw the rediscovery of thermal baths. In contrast with the popular Roman practice, Renaissance bathing required significant material resources, as many times long journeys were required. “The Travel Journal” of Michel de Montaigne is quite telling in this respect. In 1580 Montaigne visits Baden-Baden and Viterbo, comparing the existing facilities with those of Plombières, Chaudes-Aigues and Barbotan in France.

The curative properties of the mineral and thermal waters were understood at the level on medical science at that time. “Italian physicians retrieve and study lost Antiquity medical treatment texts, with the result of revaluing the therapeutic qualities of thermal waters”. [6] In 1571, Bacci publishes in Venice, *De Thermis*, a comprehensive work which describes all types of waters and their curative effects. All these prove that thermal baths were active and became popular again during the Renaissance.

II.4 XIX – XX centuries

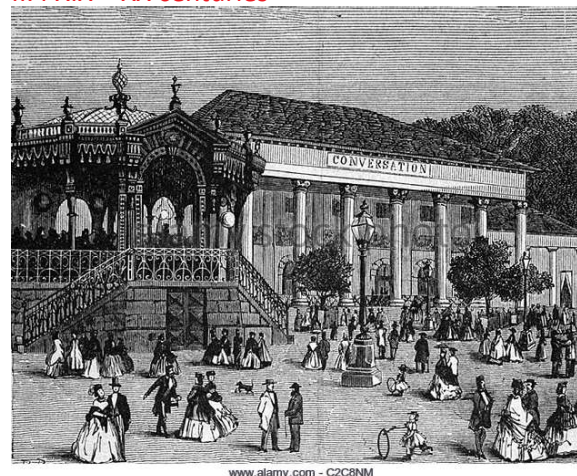


Fig. 2. View about 1886 Spa Hotel in Baden-Baden, Germany [7]

“At the start of XIX-th century, the interest for baths was high. The advance of chemistry made possible the thorough testing of waters, in order to establish the composition and improve the therapeutic use.” [7]

The widespread belief was that each disease can be treated with a particular mineral water. More than that, treatments included non-therapeutic activities (sport, walking, massage, wraps, diet, etc.). This way the destinations famous for their services, treatments and thermal waters, became real resorts.

“In his *Great SPAS of Central Europe* (Rowman & Littlefield, 2015), David Clay Large affirms that the balneary facilities were <<the contemporary equivalent of great medical and rehabilitation centres, of golf resorts, conference centres, fashion shows, musical festivals and even hideouts for love affairs – all gathered in one

place.>>”[8]. In fact, under the pretext of all kinds of treatments people were enjoying the non-therapeutic and entertainment activities. Balneary destinations became crowded, Baden Baden (Germany) being the most famous resort of Continental Europe. „There was the place to see and be seen.” [7]

II.5 The contemporary spa

By the middle of XX-th century, a new concept, related to the Spa, is introduced and gains recognition, the “wellness” (noun 1. quality or health condition of body and mind, as a result of conscious effort; 2. a medical approach which promotes disease prevention, longevity, rather than tackling just the disease itself; word’s origin- 1957- well (being) + -ness). [9]

“During the decades 1980-2000 the wellness movement becomes widespread and starts getting recognition from the medical, academic and corporate communities.” [10] By the end of XX-th century, many large corporations introduced wellness in the workplace. The fitness and Spa related industries experienced rapid growth worldwide. Celebrities and expert trainers were instrumental in reaching out to the public and making wellness popular.” [10]

In the first decades of XXI-st century, the pronounced interest for body look, as well as mental comfort, gave a real boost to the Spa related industries, the global market of which stands today at around two trillion dollars. Alongside the beauty and anti-aging products, the nutrition schemes and diets, fitness or alternative medicine, the Spa related industries are an important component of contemporary well-being, in the larger context of generalized pollution, unhealthy foods and stress. The historical evolution of baths/ *thermae*/ Spas testifies for man’s constant search for the healthy upkeep of both body and mind, as in the Latin *mens sana in corpore sano*. Would that be for the curative qualities of water or the benefits driven from water treatments, humankind never stopped using water in various forms (springs, thermal and public baths, Spas, etc.). This way, the baths, *thermae*, Spa architectural programme was refined in time and gained in complexity by incorporating new complementary functions.

III. CASE STUDIES: SPAS IN DIFFERENT CONTEXTS: LOCATION, SOCIAL AND TEMPORAL

The functional typology of Spas is largely defined by site characteristics. A natural setting or an urban one, deprived of significant natural features, will lead to different solutions. As shown in Introduction, the first baths/ *thermae* were most probably make-shift facilities located near the water source. Nowadays, the practice of bathing in natural pools, dating thousands of years back, is still alive in the cenotes of Central America (cenotes= fountain or natural pool, more common to Central America, result of calcareous slab collapse which unveils underground water, used by the ancient Maya people for rituals and offerings). [11] A natural setting allows of course for solutions that can relate function with the dominant visual and symbolic elements of the landscape. On the contrary, in the case of an urban setting, lacking natural features, the elements of interest have to be found inside. In this case the Spa can be considered as a relaxing micro-oasis, in which, alongside the specific services, provision is left for socializing areas. Other than site characteristics, the economic and social conditions specific to the historical period considered, leave their mark on the layout and plastic expression. The case studies analysis aims to compare some programme solutions while considering the influence of above-mentioned factors.

III.1 The baths of Caracalla

A famous example of urban public baths are „The Baths of Caracalla, situated on the Aventin, one of the most exclusive area in Ancient Rome. Their dimensions were imposing, and the entire compound spread over 11 hectares.” [12]

Reduced to ruins nowadays, the Baths of Caracalla (III-rd century A.C.) represented a truly architectural masterpiece, with a complex functional scheme, which could service over 1000 people at a time.

As seen in the plan bellow the composition is symmetrical, the spaces being arranged along major and secondary symmetry axes.

Demonstrating again their skillful building technique, the Romans erected *thermae* which withstood hundreds of years: brick and stone

walls reinforced with Roman cement core and covered in polished marble. As shown in the picture below, the thermae had several pools (hot water, lukewarm or cold, as well as swimming pools), dressing rooms, exercise rooms, library, gardens, stadium and even shops. Hence, the Romans evolved from springs and thermal baths to sophisticated public baths, perfect places for meeting, socializing and relaxing.

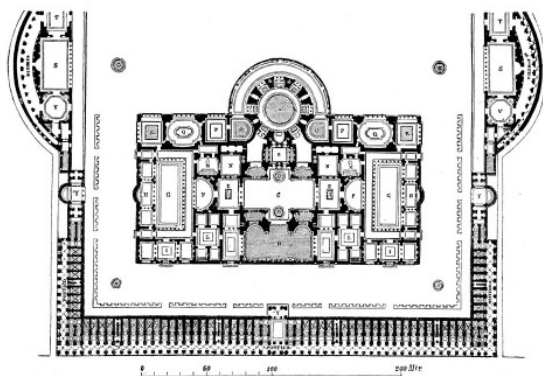


Fig. 3. Baths of Caracalla-Plan

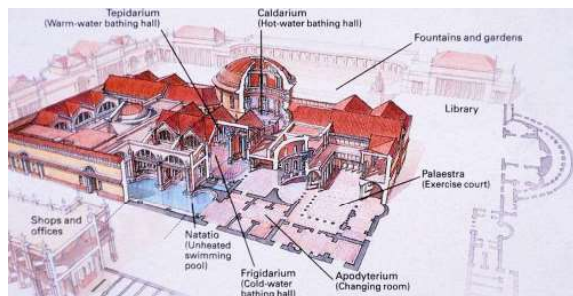


Fig. 4. Baths of Caracalla- Axonometry

Function wise, the Romans thought over carefully each area: text „...the pool is outside, sun exposed” [12] – in reference to the cold water pool, which, in Romans opinion, had to be outside as to draw full health benefits.” In order to better keep the hot air in the main room the corridors leading to it were semi-circular.” [10] These hallways were leading towards the caldarium (hot water baths). „In the centre of the cupola, was placed the oculus which allowed a beam of light to light the room and the pools.” [12] The feeling created inside is a key compositional element, created by the opposition light-water and the zenithal light. The finishing materials and decorative motifs

used, referred to the nature outside. “This mosaic depicted various animals, birds and fish.” [12]

III.2 The Vals Thermae

The setting for the Vals Thermae, Switzerland, is characteristic for the small rural/ urban settlements in the Alps, which is to say that the advantage of great vistas is somehow diminished by site constraints. Completed in 1996, The contemporary masterpiece of architect Peter Zumthor, “are an example of lyric minimalism elevated to its subtler and most refined level.” [13]



Fig. 5. The Vals Thermae -Exterior [14]

„Built above thermal springs in the Graubunden Canton, Switzerland, The Vals Thermae combine the functions of Spa and hotel, achieving a complete plastic and sensorial harmony. The concept of the project was the creation of a structure reminiscent of cave architecture.” [14] “Mountain, stone, water – building in the stone, building with the stone, into the mountain, building out of the mountain, being inside the mountain – how can the implications and the sensuality of the association of these words be interpreted, architecturally?” Peter Zumthor [14].

In reference to the context, Peter Zumthor’s creation is in perfect balance with its surroundings, some rooms are even dug at the base of the hill. He stresses out, the preference for local materials (Valser Quarzite blocks) used in an ingenious manner, creating a leitmotif alongside light and water. Simple and decisive lines, successfully translate a stern minimalism, compensated by the surprising presence of warm stone surfaces.

The interior labyrinth like space has few materials but offers in exchange a sophisticated play of light and shadow, a constant dialogue between vitality and mystery. Enriched by light, water projects more depth and transparency, leading towards a spiritual experience, of descending in and getting purified by light. The visual and symbolic impact of light is so overwhelming that it can be said that it is materiality, even though its qualities are brought alive by the surfaces around.



Fig. 6. The Vals Thermae -Interior [14]

III.3. Rancho la Puerta

The second half of the XXth century, witnessed a loss of interest for the traditional baths, their place being taken by modern Spas, under the influence of advances in medicine. The promoters of the modern spa in America (Central America), Edmond and Deborah Szekely developed Rancho la Puerta in Mexico in 1940.



Fig. 7. Rancho la Puerta 1940 [15]

“There are some machines you can entrust to others. There are people who know how to make them as well or better than yourself. But there is one that you can entrust to no one else; it is the temple...the body...it is for yourself to readjust it and make it harmonious.” [15]
The main concept is body and mind wellbeing,

goal to be reached by several complementary activities.

The clients are encouraged to explore, to walk, to do sport and in general, to reconnect with nature.

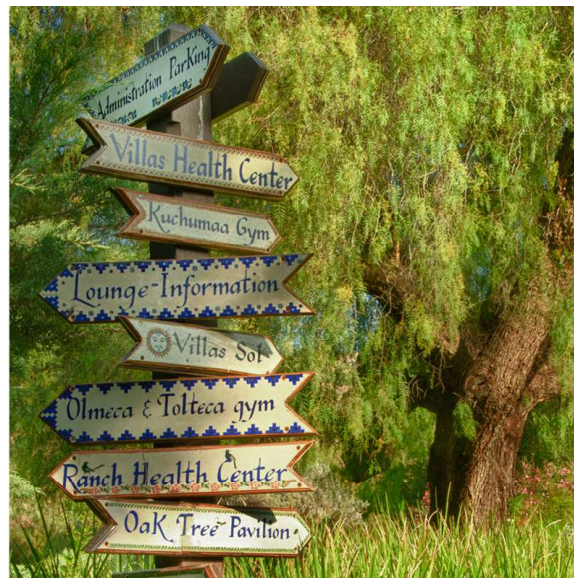


Fig. 8. Rancho la Puerta now [15]

The Spa is not restricted anymore to water therapy, it reaches out towards new physical and spiritual horizons; the ranch provides a variety of services such as beauty and body treatments, fitness and aerobics, open air meditation, cold and hot pools; classes and workshops are organized on themes ranging from art and nutrition.



Fig. 9. Map of Rancho la Puerta [15]

The comparative analysis of the selected cases presented above, leads to the conclusion that the functional schemes, determined by the re-

relationship with water, have to fulfill the requirements as well raised by the setting, would that be a natural or urban one. Other than solving the functional aspects, Spa design must respond as well to the economic and social realities of the day and to attempt to express the symbolic qualities of water and light, using the plastic language typical for the historical period in case.

IV. THE CREATIVE USE OF THE RELATIONSHIP WATER-LIGHT AND ITS SYMBOLIC CONNOTATION APPLIES TO SPAS DESIGNED IN EXISTING INTERIOR SPACES

As seen in the case studies presented, the functional requirements of the programme evolved in time, in the beginning the Spas being used for cleansing, relaxing and the treatment of various health conditions. Alongside the spaces allocated for water related activities and treatments, the programme grew to include other activities, such as sport, socializing and food outlets. It can be said that the rediscovery of sport and its inclusion in the contemporary Spa programme closes the circle, as it reminds us of the palestra from the antique thermae. We have already shown that a fundamental requirement of a contemporary Spa design is to solve the functional aspects of the programme. The other fundamental requirement is the use of a plastic language which can express the symbolic properties of water and light. We could affirm that the main element defining a Spa is water, which in turn, associated with other elements, especially light, gets a new symbolic value.

As stated in the beginning, the objective of the study is to analyse the topic of designing a Spa in an existing interior space, in the contemporary social and economic context, the provision for natural light, and not least, the search for a symbolic vocabulary.

This way, the comparative analysis focuses on contemporary design concepts, starting though from a natural case, which displays the inimitable and symbolic language of nature.

IV.1. Cenotes

A spectacular natural „construction”, this geological formation could be associated to the SPA programme.

A cenotes is in fact a perfect juxtaposition between two key elements, the unveiled subterranean water and sunlight. The symbolic meaning of these two elements are overpowering, reason for the ancient Maya to use cenotes for sacred ceremonies.



Fig. 10. Cenote Ik Kil Yucatan [16]

„The cenotes were revered by the Maya people because it was a reliable water source during the drought seasons; [...] they made their settlements around these spiritual fountains and believed that they were gates between humans and gods.” [16]

According to their relationship to natural light, Cenotes can be structured in those totally deprived of light, located underground, those with a large opening and finally those with a reduced or local, oculus like, opening. In each case the interaction water– light generates different perspectives and interpretations.



Fig. 11. Medium size opening Cenotes [16]

IV.2. Fazenda Boa Vista-Spa



Fig. 12. Exterior perspective over the Spa [17]

Located in Porto Feliz, Brazil, the project is a complex residential hotel development which incorporates a variety of activities: Spa and fitness, children playgrounds, equestrian, golf courses, pools and large private forests.

The Spa design projects a simple and clean visual expression. Organized on two levels, ground floor and basement, with white ceramic finishes, the interior space induces a feeling of peace and purity, atmosphere enriched by the refined use of natural light. Light filters inside through vertical or zenithal openings, towards small patios full of greenery, almost each time associated with the presence of water.



Fig. 13. Indoor view of the pools, reflexology alley, hydrotherapy pools [17]

The artificial lighting is as important in keeping a constant level of interest as perimetral light covers heighten the flowing effect of ceilings. Probably the most telling image is that of a Scottish shower, where the cleansing ritual is completed by the zenithal light beam.



Fig. 14. The Scottish shower [17]

IV.3. Aigai Spa

„In Roman mythology Aigai was the underwater realm, in the depths of the ocean, where Neptun, god of waters and seas, use to rest and regenerate.“ [18]



Fig. 15. Aigai Spa facade and entry [18]

Located in Sao Paulo, Brazil, this Spa was developed as an urban oasis [18]. Isolated, but not totally cut from the city, the building projects outside a continuous blind wall covered in vegetation, which allows for a gradual discovery of the interior layers. This visual and phonic encl-

sure helps of course to set the interior atmosphere. The vital dialogue with nature is achieved through many patios in which light and water are the main players. sure helps of course to set the interior atmosphere. The vital dialogue with nature is achieved through many patios in which light and water are the main players.



Fig. 15. Patio Aigai Spa [18]

Besides the spaces allocated for treatments, a hammam inspired bath is located on the upper level. The ritual of cleansing and purification through water is completed by the presence of zenithal light, inducing this way a higher contemplative and spiritual experience.



Fig. 17. Hammam Aigai Spa archdaily [18]

IV.4. Spa in a Cave – personal contribution



Fig. 18. The facade of the proposed building

The remodeling of a building located in a compound comprising restaurants, indoor entertainment, sport and beauty treatments, gives the opportunity for the design of an urban Spa. The existing structural configuration of the building, steel frames with light partitions and enclosure, allows for a reasonable degree of repartition, as required by the programme.

On the other hand, besides the lack of natural elements, understood as landscape features, the amount of available natural light is not enough at all.

Starting from these two major handicaps, the design solution selected developed a spatial-symbolic concept, projected inwards and lit zenithal, in a manner reminiscent of the cenotes or the Roman thermae. Called Spa in a Cave, the project proposes the use of skylights in order to allow the presence of natural light, which, depending on the moment in time will materialize differently the interior surfaces, reinforcing this way the ritual and spiritual meanings associated with water and water treatments.



Fig. 19. Building Section

This approach made possible a further search for a plastic language capable of expressing the symbolic properties of water and light, in a neutral space lacking the advantages of a natural setting.



Fig. 19. Interior Perspective

The exercise demonstrates that a critical comparative analysis of the case studies and the understanding of the evolutionary process of the Spa programme, makes possible a viable design remodeling solution.

V. CONCLUSIONS

The study had as an objective the topic of contemporary Spa design and more precisely the reinterpretation of water and light symbolism and the relationship to the setting (nature, urban, resort/ compound). The cases presented show that besides the economic and social parameters, the location/ setting has a major influence on the design solution. Nevertheless, the apparent shortcomings of the site can be overcome and transformed into advantages, as shown in the example above/ personal contribution.

The poetic expression of water and light is illustrated by examples taken from different historical periods, which emphasizes the constant fascination of mankind with the subject.

The personal contribution focuses on two main directions, the remodeling of an existing building with an unfavorable setting and largely deprived of natural light and the creative use of a plastic language in order to express the symbolism of water and light.

Besides the functional side, the poetic component is the component adding real value to the project. As a general conclusion it can be said that an innovative reinterpretation of water and light symbolism in a contemporary Spa design is both possible and inspiring.

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