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Cultural aspects of sauna and SPA architecture in the city – examples of design and execution

Introduction

SPA stands for *sanus per aquam* which in Latin means *health through water*. SPAs are supposed to provide the atmosphere of peace and relaxation and the activities connected with water are to positively affect the human body and mind [6, pp. 66–71]. The term SPA is becoming more and more popular in everyday life. At present SPAs are associated with specific activities (massages, biological regeneration in its broad sense, baths, etc.) as well as products and spaces that are connected with water treatment and special rituals. SPAs are also reflected in the architecture of such buildings as *thermae*, baths, saunas and other buildings that are more and more common also in the city space.

The origin of SPAs can be traced back to hot baths that were present in Asia and in time they were adapted in Europe. Still in the 7th–5th centuries B.C. there were cases of building bonfires used also for baths (mainly by Slavic tribes as well as in Syria, Greece, and Egypt) [4, pp. 6–7].

The ancient Roman baths can be considered the first SPA spaces. The oldest baths known as *thermae* were discovered at Pompeii and they date back to the 2nd century B.C. [5]. The Baths of Caracalla from the 3rd century can be considered some of the biggest. The most important elements of the functional and spatial program of the ancient baths include *apodyterium* (room for undressing), *tepidarium* (room for warm bath), *caldarium* (room for hot bath), *frigidarium* (cold water bath), *palestra* (outside space for exercises). Baths were important buildings in the functional and spatial layout of ancient cities – located in the neighborhood of other important facilities so they could be often used. The greatest and the most magnificent

of them could occupy from several to more than a dozen hectares (e.g. the Baths of Caracalla – 20 hectares) and they housed libraries or gyms and they were big enough to provide room for a few hundred or even a few thousand people at the same time. The interior layout of the Roman baths should be considered highly characteristic. Beginning from the baths of Titus, a double (symmetrical) layout of the rooms with *frigidarium* in its center and the other smaller rooms around it was popular. The *frigidarium* itself and the spaces around it was very impressive, monumental, tall and vaulted often with apses around it, and the whole structure provided effective perspective views [5] (Fig. 1).

Later baths were public and few private Turkish baths (*hamam*) or Arab baths popular in Islamic countries. The

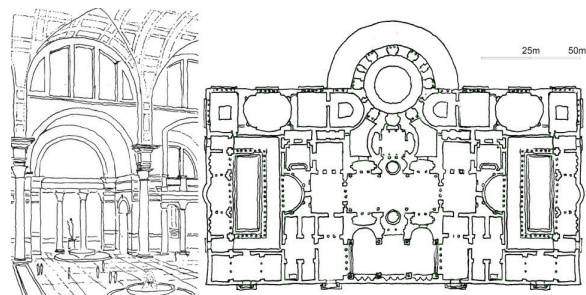


Fig. 1. The Baths of Caracalla in Rome (212–216). An attempt at reconstruction (left) and floor plan (right). Source: [10] (hand sketches by T. Bradecki, B. Uherek-Bradecka, 2012)

Il. 1. Termy Karakalli w Rzymie (212–216 r. n.e.). Próba rekonstrukcji (po lewej) oraz dyspozycja przestrzenna rzutu (po prawej). Źródło: [10] (szkice odręczne T. Bradecki, B. Uherek-Bradecka, 2012)

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greatest of them included numerous baths constructed later during the Ottoman Empire also in the conquered territories (the most famous include the Turkish bath Rudas in Budapest from the 16th century.) The first mentions of the baths in Europe come from the turn of the 10th and 11th centuries: they were then small wooden structures where apart

from the vestibule there was the main room with a stove on which water was poured to get a lot of steam [4, pp. 6–7], [2]. Later European baths were in general privately owned by the rulers; they were also built in monasteries, and public baths were more rare [1, pp. 130–132].

Contemporary Sauna Structures

The evident growth in interest in hot baths could be observed in the 20th century, mainly due to the more popular knowledge of their therapeutic properties. The terminology connected with bathing facilities is worth noting: originally *thermae* meant a complex of buildings used for hot baths, entertainment, and relaxation; baths were often parts of *thermae* – rooms used for taking hot baths in water, water vapor or air. Sauna, on the other hand, is a more popular term today meaning a special kind of bath (acc. to the popular Encyclopedia it is a Finnish bath.) So it can be claimed that the terms sauna and bath can be used interchangeably (in some situations) because their functions are very similar, whereas at present we can talk about an evident disappearance of bathing for hygienic purposes and that is why the term sauna is more popular. At present Finland is considered to be the place of origin of saunas – places designed for hot baths. Saunas are very popular there which is reflected in their numerous designs in public buildings and private apartments. The architecture of sauna structures is usually traditional – they are made of wood to as separate buildings or to be fitted inside other buildings. A typical functional and spatial design would include a vestibule to undress and a sauna room with benches and a stove. In most cases the space in front of a sauna is used for cooling: both in the past and at present a bucket with cold water, a river, lake or snow and ice can serve the cooling function.

At present one can notice a broad diversity and specialization of spaces designed to serve the functions connected with the SPA. Some of them are dedicated exclusively for therapeutic practices: massages, therapy, various kinds of special baths. Others include sauna structures designed for rituals connected with building bodily strength in saunas. The rest of the article discusses the huge sauna facilities.

At present one can notice the process of specialization of saunas due to different temperatures, air humidity or accessories such as scents or light. The most popular include:

- Finnish saunas (often described as dry saunas, 80–100 °C and humidity up to 30%),
- wet saunas (temperature 50–70 °C and humidity up to 50%),
- smoke saunas (temperature 50–60 °C and humidity 80–100%),
- aromatic saunas (temperature 60–100 °C, humidity 0–50%), fragrant oils are poured on hot rocks,
- salt saunas (saunas with elements made of salt blocks that create a sea and salty microclimate),
- saunas with color therapy (saunas equipped with special lamps emitting light in six colors of the prism, providing a unique ambiance as well as healing treatment – bioenergetic),

- bread oven saunas (saunas with bread ovens where bread is baked and eaten and where the aroma is also used as an element of sauna ritual – these saunas are in a sense an analogy to the historical bread ovens that were used as saunas when there was no more bread).

All those definitions and parameters are partly conventional; at present experiments are done with different sauna types and attractions as well as different auxiliary functions, including cooling spaces – necessary to use right after leaving the sauna (cold showers, buckets with cold water, cold water swimming pools, caves with ice rub as well as snow and ice caves) and lounges (spaces for rest after sauna sessions).

The most famous sauna structures in Europe include Mediterana in Bergisch Gladbach in Germany with a very extensive complex of more than a dozen saunas, baths and numerous other auxiliary spaces dedicated to them. The complex has e.g. aromatic, salt, Finnish, Moorish and other saunas – all interiors are decorated with architectural motifs alluding to specific themes. Another example of a typical sauna complex is Bad Bentheim in Germany with seven external thematic saunas (hot, Finnish, eucalyptus, herbal and many other auxiliary functions such as tecaldarium, vaporium (hot rooms) as well as a complex of recreational swimming pools and a group of SPA and wellness amenities. Therme Erding, one of the largest thermal bath complexes in Europe, with its 24 thematic saunas is just a part of a huge functional program including swimming pools, slides, sports and recreation areas.

Rarely do the sauna structures provide only one function – most often this is a supplementary function of a greater SPA complex connected with swimming pools (usually a water park) or some other recreation complex. A significant growth in the number of publicly accessible saunas in Poland began in the period after the 1990s and it has continued until now. It is also worth noting that most of them operate in urbanized areas (in already existing buildings) or near them.

The biggest sauna complexes that have been opened so far in Poland include the following:

- complex of saunas in Wrocław Water Park,
- complex of saunas in ‘Banya’ in Białka Tatrzańska,
- complex of saunas in ‘Termy Maltańskie’ in Poznań,
- sauna complex ‘Saturn’s Palace’ in Czeladź,
- sauna complex in water park Nemo in Dąbrowa Górnicza.

The criteria of the selection included the existence of at least four saunas of different types and auxiliary spaces such as relaxation rooms, extensive cooling sections, baths as well as scale i.e. the size of specific saunas in respect of

Table 1. Characteristic features of selected sauna complexes; on the basis of information published by the facilities (ed. by T. Bradecki, B. Uherek-Bradecka, 2012)

Tab. 1. Charakterystyka wybranych kompleksów saunowych; na podstawie informacji publikowanych przez wybrane ośrodki (oprac. T. Bradecki, B. Uherek-Bradecka, 2012)

Location	Year of establishment	Number of saunas, baths and other	Number of baths and other	Number of indoor saunas	Number of outdoor saunas	Rituals for many participants	Space for SPA practices	Separate space for consumption next to saunas	Other function
Wrocław Water Park, Wrocław	2008	5	2	2	1	+	+	+	water recreation complex
Aqua Park 'Fala', Łódź	2008	5		4	1	-	+	-	water recreation complex
Terma Bania, Białka Tatrzańska		6	2	2+1	1	-	+	-	water recreation complex
Water Park, Kraków		4	1	3	0	-	-	-	water recreation complex
Termy Maltańskie, Poznań	2011	11	5	4	2	+	+	-	geothermal recreation complex
Saturn's Palace, Czeladź	2011	9	5	3	1	+	+	+	hotel, conference center
Water Park Nemo, Dąbrowa Górnicza	2001	1	1	4	1	+	-	-	water recreation complex

volume or area. Table 1 presents the characteristic features of the buildings.

It can be claimed on the basis of collected data¹, the most important of which are presented in the Table, that

¹ The data presented do not reflect the qualitative features of individual centers. This applies both to saunas and baths (the distinction can be conventional) as well as to the relaxation and cooling sections (not included in the table which affect the architecture of the complex) and the space provided for SPA practices (in this case it is difficult to describe them briefly without qualitative features).

the number of publicly accessible saunas, including especially those next to large water recreation centers has been growing over the last years. However, only in some cases do the sauna spaces provide the possibility of rituals for many participants; most of them rather complement the offer of the main building. Apart from numerous interior saunas and baths which can be considered contemporary reinterpretation of ancient *thermae*, external saunas are becoming more and more popular.

Examples of Original Sauna Designs

External saunas for many users, which so far have not become so popular in Poland (there are only a few such designs), can be considered rather important in the functional and space program of sauna complexes. The article presents the original design of an external complex of thematic saunas at Wrocław Water Park which complements the offer of the existing saunarium. The main assumption of the design was the creation of an original complex of saunas with varied size and themes, and so the project features: a multimedia sauna (with an audio-visual system integrated with interior lighting (a form of color therapy), a salt graduation tower (with salt water running down on the walls for a better and more healthful microclimate), a sauna for as many as 50 to 80 people and a bread stove sauna and a sauna partly submerged in the ground, similarly to the original Russian sauna so called *banya*.) The whole complex shall be located in the existing garden in the sauna section at Wrocław Water Park with a separate entrance and exit to any of the attractions. The design also includes a large relaxation lounge with a fireplace and a consumption area. All saunas shall be located in one ground floor building made of

wood so that it would blend into the existing garden and the Finnish sauna (Fig. 2).

At present the complex of Termy Rzymskie (Roman *Thermae*) at the Saturn's Palace in Czeladź is one of the most famous buildings dedicated exclusively to SPA in Poland. The main motif of the style of the complex is worth noting; it is supposed to resemble the ancient *thermae* in Pompeii. The saunas are located in the basements of the converted Saturn's palace from the beginning of the 20th century that once housed the headquarters of Saturn coal mine (Fig. 3). It is one of few examples of design where the recreation function does not dominate – the SPA complex in Czeladź complements the hotel and conference functions that are located in the remaining part of the building. The functional program offers a number of saunas and baths which allude with their themes to antiquity, which was expressed primarily in the interior decorations (Fig. 4). The complex includes a large external sauna (ca 5×12 m) The main objective of the project was to design a sauna for a number of users with benches on three levels for as many as 49 people sitting around the center for the person conducting the ceremony.

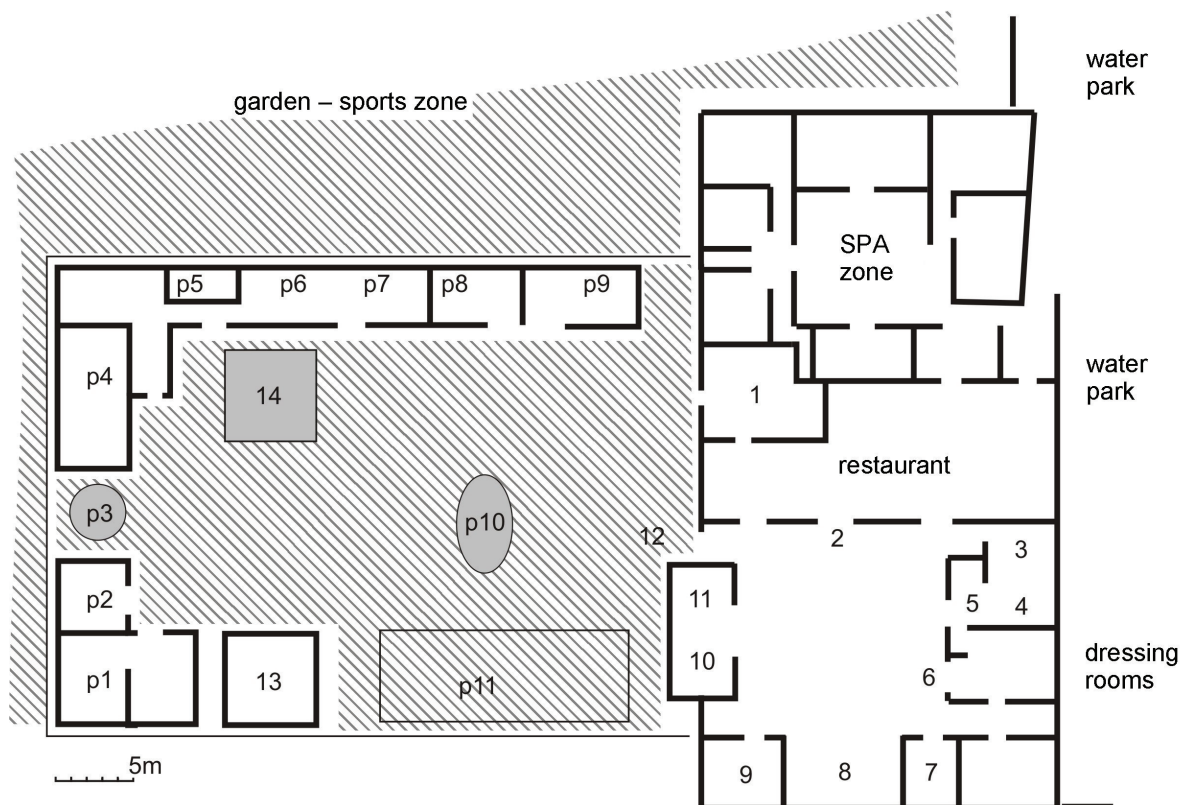


Fig. 2. The functional plan of the existing and planned sauna section and SPA at Wrocław Water Park; the existing sauna section: 1 – relaxation room, 2 – stands for warming up hands, 3 – solaria, 4 – steam bath, 5 – swimming pool for Kneipp hydrotherapy, 6 – ice fountain, 7 – stone bath, 8 – Thelasso swimming pool with salt water, 9 – cold water room, 10 – Finnish sauna, 11 – biosauna, 12 – garden, 13 – external Finnish sauna, 14 – external swimming pool with cold water, planned section: p1 – multi media sauna, p2 – salt graduation tower, p3 jacuzzi with a cooling swimming pool in the rock salt cave, p4 – sauna for many people, p5 – bread stove sauna, p6 – bar, p7 – rental, p8 – ice cave, p9 – earth sauna, p10 – external Kneipp water massage, p11 – recreation pergola with deckchairs; hatched external section, garden (ed. by T. Bradecki, B. Uherek-Bradecka, 2012)

II. 2. Układ funkcjonalny istniejącej oraz projektowanej strefy saunowej i spa we Wrocławskim Parku Wodnym ; część saunowa stan istniejący:

- 1 – pokój relaksacyjny, 2 – stanowiska do rozgrzewania rąk, 3 – solaria, 4 – łaźnia parowa, 5 – basen do hydroterapii Kneippa, 6 – fontanna lodowa, 7 – łaźnia kamienna, 8 – basen Thelasso z solanką, 9 – sala zimnej wody, 10 – sauna fińska, 11 – biosauna, 12 – ogród, 13 – sauna fińska zewnętrzna, 14 – zewnętrzny basen z zimną wodą, część projektowana: p1 – sauna multimedialna, p2 – tężnia solankowa, p3 jacuzzi oraz basen schładzający w grocie skalnej, p4 – sauna wieloosobowa, p5 – sauna chlebowa, p6 – bar, p7 – wypoczywalnia, p8 – grotta lodowa, p9 – sauna ziemna, p10 – zewnętrzny masaż wodny Kneippa, p11 – pergola wypoczynkowa z leżakami; kreskowaniem oznaczono część zewnętrzną, ogrodową; kreskowaniem oznaczono przestrzeń zewnętrzną ogrodu (oprac. T. Bradecki, B. Uherek-Bradecka, 2012)

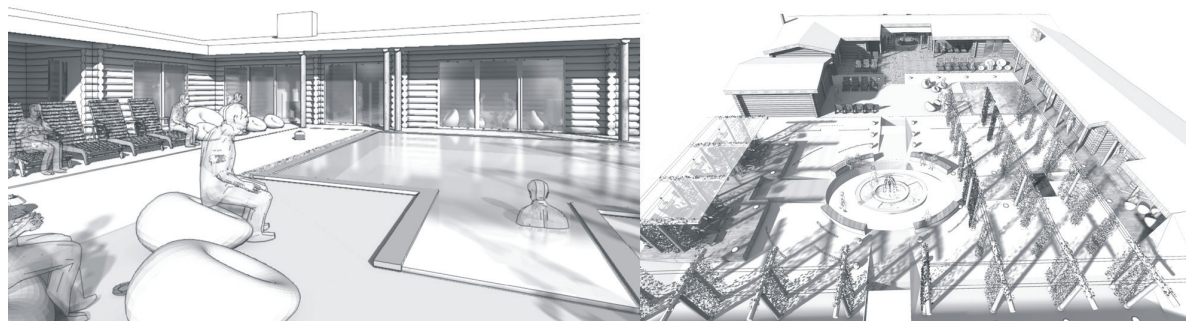


Fig. 3. Perspective view of the planned complex of thematic saunas, view from above on the right, perspective view on the left – the existing swimming pool for cooling and the newly designed building (ed. by T. Bradecki, B. Uherek-Bradecka, 2012)

II. 3. Widoki perspektywiczne projektowanego kompleksu saun tematycznych, po prawej widok z góry, po lewej perspektywa – istniejący basen do schładzania oraz nowo projektowany budynek (oprac. T. Bradecki, B. Uherek-Bradecka, 2012)

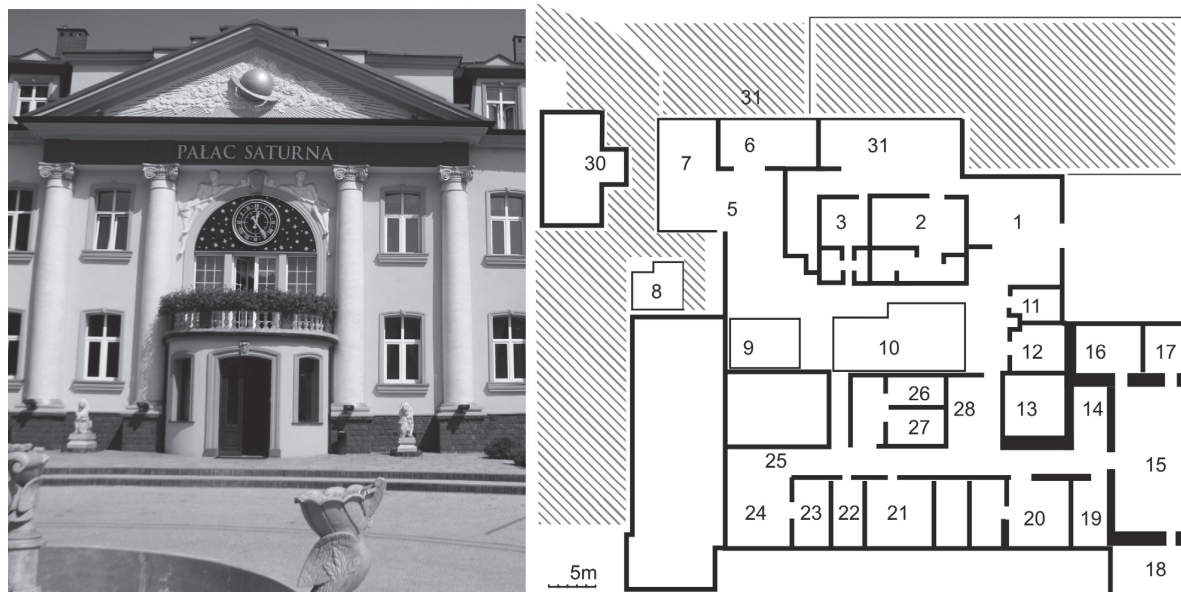


Fig. 4. Complex of Roman Thermae in Saturn's Palace in Czeladź; on the left – main entrance, on the right: functional program: 1 – Reception/main entrance, 2 – Apodyterion men's dressing rooms, toilet, shower, 3 – Apodyterion women's dressing rooms, toilet, shower, 4 – nudist beach, 5 – restaurant, 6 – rental, 7 – recreation deck, 8 – external swimming pool, 9 – swimming pool with massage chairs, 10 – swimming pool with waterstream, 11 – Temple of Sun solarium, 12 – Temple of Cleopatra bath and massage, 13 – Temple of water, 14 – Frigidarium cold water well, shower, 15 – atrium with ice fountain, 16 – Sauna of Cleopatra, 17 – biosauna, 18 – Sauna of Cesar, 19 – Laconium dry bath, 20 – Tepidarium rental, 21 – Calidarium thermal cave, 22 – Graduation Tower: thermal salt bath, 23 – Rasul, 24 – Hamam, 25 – Reception, 26 – Caldaria herbal bath, 27 – Caldaria flower bath, 28 – VIP Apodyterion dressing rooms, toilet shower, 29 – Beach, 30 – Temple of Saturn, 31 – Decks.

Source: [10] (ed. by T. Bradecki, B. Uherek-Bradecka, 2012)

Il. 4. Kompleks Termy rzymskie w Pałacu Saturna w Czeladzi; po lewej – wejście główne, po prawej: program funkcjonalny: 1 – recepcja/ wejście główne, 2 – Apodyterion: szatnie męskie, WC, prysznic, 3 – Apodyterion: szatnie damskie, WC, prysznic, 4 – plaża naturystyczna, 5 – restauracja, 6 – wypoczywalnia, 7 – taras wypoczynkowy, 8 – basen zewnętrzny, 9 – basen z leżankami masującymi, 10 – basen z przeciwprądem, 11 – Świątynia Słońca: solarium, 12 – Świątynia Kleopatry: kąpiel i masaż, 13 – Świątynia Wody: prysznice wrażeń, 14 – Frigidarium: studnia zimnej wody, natrysk, 15 – Atrium z fontanną lodową, 16 – Sauna Kleopatry, 17 – biosauna: sauna wrażeń, 18 – Sauna Cezara, 19 – Laconium: łaźnia sucha, 20 – Tepidarium: wypoczywalnia, 21 – Calidarium: grotła termalna, 22 – Teżnia termalna: łaźnia solna, 23 – Rasul, 24 – Hamam, 25 – recepcja, 26 – Caldaria: łaźnia ziołowa, 27 – Caldaria: łaźnia kwiatowa, 28 – VIP Apodyterion: szatnie, WC, prysznic, 29 – plaża, 30 – Świątynia Saturna, 31 – tarasy. Źródło: [10] (oprac. T. Bradecki, B. Uherek-Bradecka, 2012)



Fig. 5. External sauna for many users at the Saturn's Palace complex in Czeladź (photo by Tomasz Bradecki, 2012)

Il. 5. Zewnętrzna sauna wieloosobowa w kompleksie Pałac Saturna w Czeladzi (fot. Tomasz Bradecki, 2012)

Cultural and Spatial Aspects of Sauna Structures

The architecture of sauna complexes and consequently the way in which saunas are used is rather significant aspect connected with sauna structures. The historical Roman baths located in the centers of large cities had two basic functions: utility function – they were used to meet the real needs of people in respect of hygiene and recreation as well as the social function – the rituals which were

performed there and the space provided opportunities for meetings and discussions. The typical contemporary specific sauna rituals include washing up, entering the sauna, warming up (steaming up), leaving and cooling. At present such group sauna rituals as pouring fragrant oils on hot stones, fanning the users with hot air or other attractions are more and more popular. Silence is recommended dur-

ing sauna sessions, the users are, however, willing to 'receive' information and not to 'transmit' it, which is similar during cultural events. Such group sauna rituals require spaces big enough to accommodate at least 25–100 people. Such requirements cause specific space design: it is necessary to design a building that can accommodate the users on benches (auditorium) with unobstructed view or access to the center with a stove and a place for the person performing the ritual of fanning the heat (stage.) It is also necessary to provide a sufficiently big space in front of the entrance (foyer) i.e. the cooling area with various equipment used by a number of people at the same time: showers, buckets of cold water, cold water swimming pools, ice dispensers or snow caves. Aromatic séances (spectacles) (e.g. with odors) are organized with fragrant oils poured on the stones in saunas or thematic evenings with consumption. Such events attract as many as several dozen of people, which also creates opportunities for interpersonal contacts. A separate space for consumption in sauna sections is a rather significant spatial element but few complexes offer it. That function enables the participants to stay longer in the SPA and sauna facilities, which can increase the culture forming role of the whole complexes.

The contemporary sauna architecture is contemporary only in some cases; usually it reinterprets or sometimes imitates ancient patterns. Despite imitating the classical aesthetics, the model of using this type of space has changed: in ancient times the baths took a lot of space and were monumental and their individual functions were directly connected with one another, whereas at present those functions are separate. When comparing the scale of the whole complexes it can be claimed that contemporary Aquaparks correspond to ancient *thermae*, however, the main function of baths was assumed by sauna, SPA, and wellness sections – it is especially evident in the number of users: the biggest contemporary complexes can take as many as 3 thousand people (e.g. Wrocław Water Park), whereas e.g. the Baths of Caracalla could accommodate about 1600 users. The proportions of space have also changed: the larg-

est space is occupied by swimming pools and other water attractions, whereas the other spaces such as saunas have become cozy and much smaller. In some cases the space development has also changed; originally it was a large, monumental building with its facilities inside, whereas at present (Bad Bentheim, the planned saunas in Wrocław) it can operate as small, separate facilities located outside. The bigger the buildings, the more fitting they are for collective behaviors typical of cultural events – the water recreation spaces are in some cases so big that they can be used as venues for cultural events – examples can include the performance of the Puppet Theater in Wrocław Water Park ('Sharks in the Swimming Pool') or concerts and music performances in Therme Erding (the swimming pool provided space for the audience). The growing number of such cultural events taking place in this type of buildings in a way forces their location. After leaving their locations, which can be observed at the beginning of the 20th century, sauna structures go back to the urban space and become important culture forming elements more and more often used by the inhabitants of big cities.

The contemporary expectations of the SPA and sauna spaces are bigger and bigger, and consequently there is a need to create new buildings that will meet those expectations. One can talk about a trend (evident especially among people living in large agglomerations) to often use saunas with many other people at the same time, which causes specific behavior (culture) in saunas and undoubtedly affects the space development in those buildings. The contemporary architecture of sauna structures, especially those located in the cities or around them, obviously demonstrates some cultural aspects. The question remains if SPA is and will be only a fad or will it become a timeless function permanently connected with the life of city dwellers with its own contemporary patterns of both human behavior (cultural, not only in the culture of using SPA) and also in architecture.

Translated by
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Architektura obiektów saunowych oraz SPA w kontekście kultury miasta na przykładzie projektów i realizacji

Przedstawiono problematykę współczesnych obiektów saunowych oraz SPA. W artykule zaprezentowano współczesne kierunki, wg których realizuje się tego typu przestrzenie oraz przeprowadzono analizę porównawczą: sprawdzono czy i w jaki sposób obecne terminy, łańcuchy czy sauny przypominają ich odpowiedniki znane z historii. Przeprowadzono również dyskusję, w jaki sposób tego typu obiekty oddziaływały kiedyś i współcześnie na kulturę miasta. Skala i program funkcjonalny współcze-

snych kompleksów rekreacyjnych SPA pozwalają na hipotezę, że pomimo swojej rekreacyjnej funkcji obiekt może kształtować styl życia, a więc również kulturę w mieście. Jako przykład współczesnych tendencji w tej dziedzinie autorzy artykułu prezentują autorski projekt kompleksu saun tematycznych przy Wrocławskim Parku Wodnym. Zaprezentowano aktualną wiedzę na ten temat oraz opisano rolę, jaką mogą pełnić tego rodzaju obiekty w kształtowaniu kultury miasta.

Key words: SPA structures, saunas, recreation spaces

Słowa kluczowe: obiekty SPA, sauny, przestrzenie rekreacji