

THE BALNEARY RESOURCE, A GENERATOR OF BUILT HERITAGE. THE STRATIGRAPHIC FEATURES OF HERCULANE BATHS

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ABSTRACT. **The balneary resource, a generator of built heritage. The stratigraphic features of Herculane Baths.** The exploitation of natural resources, regardless of type, usually consists of two phases: firstly, the development of exploitation *processes* and secondly the development of exploitation *structures* – elements or built structures intended for the processing of the concerned natural resources. Many such structures have been declared architectural heritage monuments due to their historical, documentary, representative and aesthetical value, examples being numerous and varied. Water is the main resource that dictates the occurrence and development of human settlements and creates various typologies that derive from the accessibility, exploitation methods, and adaptation to the conditions and characteristics of the resource. With a peculiar evolution in terms of the dynamics of the binomial composed of natural resource and architectural heritage resource, mineral resources (especially balneal waters) fall in a distinct category: although mainly utilitarian in function, they have also cultural, aesthetic and even religious purposes. Besides their curative properties, spa mineral waters can be used as is, in many cases directly from the source, this being the explanation why they have generated such great and continuous interest - forming today a highly stratified built heritage background. Keeping in mind the sustainable development for a medium or a long period of time, an analysis of the interrelations between the balneal natural resource and the deriving architectural heritage is necessary. The purpose of such analysis is determining the limitations of exploitation and identifying the optimal means of safeguarding both elements, the natural water resource and the anthropogenic one, for a more rational territory management.

Keywords: "balneal resource, built heritage, conservation, Baile Herculane, spa".

1. BALNEAL RESOURCE, GENERATOR OF BUILT HERITAGE, CASE STUDY BAILE HERCULANE

The Mine law 85/2003 covers mineral resources within the country: therapeutic mineral resources, geothermal water, gases, therapeutic muds and emanations. The National Agency for Mineral Resources (Patruti 2009) gives a general definition of these resources: therapeutic mineral water, geothermal water, therapeutic mud and carbon dioxide (taking into account a series of factors such as temperature, chemical composition – 1, 2 or 3 chemical indicators, treatment type – internal or external and genetic type). The bulk of specialist literature covers the detailed analysis

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of the typologies and specificities of balneary resources. Our work focuses on identifying the relationship between the resource and heritage buildings, with a case study on the Herculane Baths, located in Caraş-Severin County. This resort has enjoyed great interest and has been exploited continuously due to its hydrology, the richness of its balneo-mineral resources and its favourable climate. The resort's main traits are the great number of mineral and thermal springs as well as their great variety: 24 springs – 10 drillings and 14 natural springs between the Herculane Train station and the Crucea Gizelei drilling, with temperatures between 17 and 62°C and with mineralisation levels between 694 and 7590 mg/l (Povara 2008), containing sulphur, chlorine, sodium, calcium, as well as hypotonic water, with oligo-minerals and constant flow (Management Plan for the Domogled Natural Park, 2003). Five groups of springs were established according to their curative properties: Şapte Izvoare, Hercule, Diana, Neptun and Traian. According to G. Simion (1982, in *Thermo-mineral Waters in the Cerna Valley Basin*), the thermo-mineral water in the Herculane area is the result of three factors: first, “one cold component, water (the dominant percentage), a heating component (hot vapors heating cold waters), and a mineralizing component, which mineralizes the already heated waters”. Cold water goes through transversal fault lines from the surface to the underground, where depth determines temperature. Various exploitation structures were built around the springs, including pools, pipes, wells, etc. Sources that have proven their curative properties over time have generated the most interesting architectural and urban structures. The residential and exploitation structures have coalesced to form an impressive cultural nucleus. Multiple cultures (Nemţeanu 2003) have left their mark on the resort, forming heterogenic built strata, most visible in its central urban area. The architect R. Nemţeanu (2003) distinguishes four periods to which the buildings pertain: antiquity, beginning of the 18th century, 19th century and 20th century. The early beginnings of the Herculane Baths are usually associated with the settlement of the Roman castrum of Ad Mediane. However, several historical sources show that the area was inhabited in the Neolithic (Salcuta III and IV cultures) and the Eneolithic (Tisa III culture) (I. Cristescu 2001). Other archaeological findings certify the presence of Geto-Dacians and Romans, before the conquest in 105-106 AD, showing that Romanisation was underway in the area. There is a hypothesis (I. Cristescu 2001) according to which the area had seen several wooden Dacian buildings, which disappeared after the Roman conquest. The continuity of human settlements in the area shows that local populations made use of the water resources for household purposes. However, using them for curative purposes can only be proven starting with the Roman occupation, through thermae, aqueducts and pools. Access to resources has a direct influence on construction plans. The Roman castrum was built taking this into account, if not precisely in order to exploit the mineral water springs. Professor Cristescu (2001) mentions several inscriptions, tabulas and votive altars dedicated to Hercules (patron of hot thermal water springs), Venus and Hygeea, proof of the many visitors coming from across the empire. The settlement suffered greatly during the Migrations; its proximity to the Roman road, originally an advantage, made it now more vulnerable. Lack of stability was an impediment to development as the Mehadia Baths switched ownership between the Ottomans and the Austrians.

According to Professor Cristescu's research (2001), the settlement maintained its balneary functions, despite the lack of new buildings: some springs were used without any facilities ("la gropan"), along with the Roman era remains or with temporary wooden structures. Under the Austrian occupation, the Herculane Baths were revived as a true balneary resort. Under general Mercy (1718), new buildings served either a strictly military purpose (barracks, taverns, stables) or pertained to civil engineering/infrastructure. Renovation works started in 1733. Roman remains and balneary installations were uncovered during the renovation works and were either destroyed or sent to the capital of the Austrian Empire. The direct consequence of modernisation works in Herculane Baths was the increase of visitor numbers, despite the ongoing armed conflicts (up to 1800). After this period, most interventions focused on densification of the built areas or rebuilding existing structures. Accommodation spaces received special attention: Hotel Francisc (1824), Hotel Ferdinand (1838), Hotel Teresina(1853), Hotel Franz Iosef (1861), and so did the balneary facilities: Pavilion 5 (1810), the Carolina Baths (1826), the Ludovic Baths (1846) and the Maria Baths (1871). Other interventions which are nowadays historical monuments include: the Central Park (1862), the Casino and the bridge over the Cerna River (1864/1900), the Train Station (1886-1887), the Power Plant (1894) - industrial architecture monument. In the last decades of the 19th century, the quality of the services in the resort increased as new 'coffee-houses', restaurants and shops opened – the basic facilities, accommodation and treatment spas, are associated with leisure services. After 1919, under the Romanian administration, the densification process continues, for both permanent seasonal accommodations. Still, most efforts focused on the modernisation of pre-existing spa structures. After 1945, interventions focused on balneary facilities: new drillings, increased flows and new pools. From the 60s to the 80s there was a real estate boom in the hotels sector, which completely redefined the resort's accommodation capacity (300, 500, over 1000 places). A new typology developed: the hotel with an integrated treatment facility. There was a programmatic focus on leisure tourism, not just as an annex to the therapeutic tourism: new sports fields were built, as well as new outdoor and indoor swimming pools, libraries, theatres, movie theatres etc. The resort developed in steps: densification, extension (the new centre) and again densification in the 90s. The historic centre was inevitably affected by these changes, as it contained the greatest concentration of treatment centres. An analysis of the history of the anthropogenic interventions built around the balneal resource shows a superposition of architectural strata; their legibility illustrates both the continuity of spa treatment in the area, as well as the functionality of historical balneary facilities; processes that occur during these phases, affecting the heritage buildings, were either extension works (in order to increase capacity) or facility upgrades allowing preservation and reuse of existing units. The least visible architectural strata are those from the Roman and pre-Roman eras, mostly just remains and archaeological sites dated IInd -IIIrd centuries BC (see the List of Historical Monuments, 2010). In the resort, these remains are centred in the area between Hotel Cerna, the Central Park and Hotel Roman. The ground floor of Hotel Roman encapsulates two Roman bathing basins, with pyramidal domes and air vents, retaining from the original architecture few

marble pools, some arches and the general structure. In the same manner the Apollo Bath incorporates at the basement level both roman installations as well as the thermal source.

From the 18th century to the beginning of the 19th century, a new nucleus was formed based on the very specific architectural programme which focused on military buildings. Initially, the Austrian authorities built light wood buildings and also used the Roman era remains. These structures were eventually destroyed (1740) or replaced with more durable buildings. In the second phase of Austrian rule (end of the 18th century – beginning of the 19th century), the buildings still had administrative or therapeutic purposes, but were built in stone, with one or two stories and were compact and symmetrical. The architecture of the facades is a clear example of Austrian military style, using austere neoclassic elements which were frequently found in regions under Austrian occupation. Our research of the relationship between heritage and thermal resources focused on the resort's two main nuclei, Hercules Square and the Casino-Park area, with their main objectives. The latter is discussed in detail in the paper "Balneary resources, a generator of built heritage. The Austro-Hungarian architecture of Herculane Baths" (S.Spânu 2011).

1.1. The Hercules Square ensemble, an austrian military architecture core, can be identified as unitary, the majority of the constructions belonging to the neoclassical and baroque influenced stratum, with later intervention (end of 19th, beg. of 20th). The area is defined in the Historical Monument Register as a military spa ensemble (CS-II-a-A-10978, the Hercules Square, from the Roman-Catholic Church to the stone bridge upon Cerna river); some of the objectives suffer radical interventions: unification of volumes, facade replacements etc.



Fig.1. *The Hercules Square ensemble*(1826),*litography - the Banat Museum Collections;* *the Apollo Spa ensemble*(2) *and the Military Sanatorium* (3)*19th century postcards.*

A particular aspect reported during the inventory of the spa-towns monuments and ensembles, led by the National Institute for Monuments Staff – the Records and Research Service (R.Nemteanu,2003), is the modification, in time, of the streets and buildings designations (re-numbering or privatisation of resorts) causing confusion and a difficult identification.

In a resort plan dated 1870, on the north side of Piața Hercules there were the Militar Sanatorium building (*Militar Badhaus*), the old restaurant "ospataria" (*Restauration*), the Spa Administration (*Badhauscommando*), the Military Sanatorium and barracks (*Ferdinandsof*), *Elisenbad* baths, all having the same austere look typical to the neoclassical military architecture. **The former Hospital for troops and petty**

officers, 1808-1810 (Hotel Domogled/Pavilion 5/*Militar Badhaus*, P-ța Hercules nr.4, CS-II-m-B-11010), located on the north side of the square, is a symmetrical horizontally developed volume, with a central axis marked by the main access, a jutting and a set of stairs. The building has three floors and attic, defined in the facade by 3 registers, but because of the square's slope the ground floor becomes a semibasement towards the northern extremity. The 2 types of bosses, used on the ground floor and 1st floor-the *piano nobile*, along with the windows frames are the only decorations. In archive images(1800-1900), the window gaps on the 1st and 2nd floor, with a french proportion of 1/3 are given a 2/3 proportion. The medical spa profile is kept with all the related facilities; only in the late 1880 a commercial ground floor and terrace (extended towards the square) are added, to accommodate the growing influx of.

Former, *Ospatarie cea mare*'- the Grand Restaurant 1812-1824 (*Restauratio*, Hotel ,Arhiducele Franz Iosef/Pavilionul 6/Hotel Dacia, Pta Hercules nr.3,CS-II-m-B11009) a ground floor, 1st floor and high attic building, connects to the adjoining building, Pavilion 5, via a flared cornice. In older representations appears in a version with a centered balcony, supported by 2 columns flanking the entrance; in photos after 1850-65, the balcony is removed. In terms of function, one can observe in ante 1865 photos the extension of the ground floor towards the square with a partially covered, furnished terrace. In 1906 the building is altered dramatically: the sober and balanced architecture of austrian origin is replaced, in accordance with the taste of the age, with a Secession influenced architecture, almost flamboyant compared to neighboring military buildings. The new building brings contrasting elements: heightened ground floor, large glass surfaces, the new proportions and ornamentation of 1st and 2nd floor, the vertical dominant – the 2 jutting towers, the symmetries. The ornamental repertoire is clearly baroque, the curved stucco frames, the facade curvature suggested through the small balconies, with art-nouveau elements, easily observed, explained through the Austro-Hungarian influence (vegetal representation, the triple arches etc). Mentioned also by Calapis (2009), the 4 medallions on the 1st floor's jutties, the only anthropomorphic representations, are references to the resorts' profile through typical characters. Summing up these different influences, the buildings' style can be considered eclectic. **The former *Military Administration and barracks 1810*** (Pavilionul 7/Hotel "Ferdinand" CS-II-m-B-11007) continues the compact and severe front of military buildings, using the same height regime (P+2+attic), the 3 horizontal register scheme, and the axis and symmetries. Together with some of the buildings on the opposite side, Pavilion 7 will undergo several embellishing interventions (by adding cast iron floral ornate balconies). These interventions represent the desire to animate the rigor and formality of the facades that opposed the general eclectic trend: the 2 balconies are continued towards the ground floor, with 2 detached volumes each adorned with 4 pilasters. In some period engravings (approx. 1856) these pilasters appear as columns, detached, as a portico; later they appear embedded. The reasons behind all these modifications are either aesthetic or functional: the growing space (several extensions toward the square) or the need to accommodate new functions – the military program with its representative role (column flanked entrances, the monumental image) is gradually replaced with tourism facilities, accommodation or

services, using a human-scale architectural language. *The Bath Administration* (Administrația Băilor CS-II-m-B-11008) is located between Pavilion 6 and Pavilion 7, completing the squares' front, and maintaining the military austrian style. Dated **1811**, the property appears in several engravings under different forms. Before the coagulation of the urban tissue, the fronts of Hercules Square were discontinuous; this situation applied also to the Administration building that was linked to its neighbour building through an arch (opening over a secondary street or access)². Consecutive modifications lead to the fusing of the 2 volumes. The fill-in is visible even today: the asymmetry from the buildings' main axis, the windows' rhythm on that particular area is noticeably different etc. The southern side of the square is completed by the Apollo I and Apollo II complexes, both belonging to the military phase. *Apollo I* ensemble is registered in the LMI/2010 with 2 objectives, *the former Shared Baths* (Baia cea mare/Baia Apollo/Ludwigsbad/Ileana, CS-II-m-B-11012.01) and *the former Officers' Sanatorium* (Pavilion 4/Hotel Severin, CS-II-m-B-11012.02). The first objective replaces previous spa lightweight constructions, from 1724 (I. Gogaltan, D. Gogaltan, 1980). Its current form is a single level building (ground floor with high attic) gaining height towards squares' eastern side, by adjusting to its slope. The facade contrasts with the adjacent fronts because of its roman influenced window type. The intent is obvious: historic influenced elements, less figurative ornamentation suggesting the functional origin of the building, the tradition of the program. A detailed description has been published in the Historical Monuments Bulletin (2005). **Former Officers' Sanatorium** – the second objective of the Apollo I complex, built in the military style in **1846**, is now attached to the *Common Baths*; the two-leveled building undergoes several changes in 1926, along with the common baths, when the southern front of the square will be unified. Under visual inspection of the northern facade it appears balanced, symmetrical; symetrica; but the functional diagram does not comply to the principle of symmetry: the volumes cluster around three inner courtyards of various sizes. Thus the alterations are purely functional, presumably to increase the accommodation capacity and to easily adapt to new therapeutic facilities. Although some ornamental elements do exist – the balconies of the *piano nobile*, the broken pediments, the facade centered pediment, the pilasters highlighting the main access – they few and subtle. **The Apollo II spa ensemble** (CS-II-a-B-11013) includes three objectives: *Severin Hotel* (1824), *Hebe Baths* (1826) and *Pavilion 3* (1864). The same austere architectural language is used, the ensemble closing up the side of the square up to the stone bridge. Some earlier XIXth century lithographs reflect a somewhat different situation, with both of the squares' fronts parallel, while late 19th and early

² This hypothesis emerged from the study of a series of etchings and lithographs. Keeping in mind the subjective nature of the works, the author's artistic license (characters' clothes, exaggeration – the idyllic character of the landscape) and awkward representation (see the use of the perspective, the human scale in relation to the buildings) one can still see the forming process of the Hercules Square front: visible penetrations (entrances) and the ruptured northern front, inconsistent fronts, as is the case with the southern side of the square, where only two buildings can be seen (see F. Wolf, Banat, Baile Herculane, sec. XIX, lithography, 0,400x0,570, the sketch book of L. Erminy, Cursul Dunării, Viena 1826, *Banatul in gravurile de sec. XVI-XIX, Din colectiile Muzeului Banatului*, cd-multimedia, 2010, D. Staicovici et al.)

20th century representations show a fractured contour of the southern front, following the rough bank of Cerna River. Through the alterations of 1867, the independent building of the Hebe baths is extended and becomes connected to the Apollo II complex, following arh. Doderers' project which also included the upgrade of the stone bridge over Cerna – a closed cast-iron corridor (CS-II-m-A-10973) that joined Pavilion 2, Hebe Baths-*Carolinenbad* (CS-II-m-B-11013.01), Pavilion 4-*Franz Iosefshof*, Pavilion 3-*Frantzenhof* and the Common Baths (Apollo I). From an urban point of view, the reconstruction of *Hebe Baths* resolves the buildings "aggressive intrusion" into the squares' space (by breking down the module and rounding up its corner) and also the lack of continuity of the southern built front; this adjustment provides a unitary character, achieving a smooth transition towards the core of the resort the Casino-Park area. The reason behind the implementation of the covered gallery is simple: accessibility between services and the protection of the hotels' guests; a unique spatial-visual effect is achieved, an intimate feel of the space. The facade of the Hebe Baths appears as a small building, with a withdrawn ground floor, symmetrical glass surfaces, emphasised stucco bosses, and small windows; the tectonic ground floor is counterbalanced by the slender aspect of the terrace and the finesse of cast-iron details. Not only from an urban view-point, but also style wise, the building makes the transition to the 1900 spa-town architecture.

2. NATURAL AND HERITAGE RESOURCE MANAGEMENT

The diversification of the heritage notion, limited to historical monument until the 19th century, alters the general perception of heritage and creates new management models – of the object of the subsequent space. The crisis of urban space of the great European cities produced an outward orientation-sprawl, but also a shift towards the inside: *densification* through rehabilitation and refurbishment, resorting to the heritage space. Between the trend of rigid conservation of valuable heritage objectives, bearing the risk of 'museification' and mono-specialization, and loose adaptation of conservation principles of spatial and functional needs of the moment, the issue of sustainable development remains the main interest of the authorities (Garat, 2008). In the case of Herculane resort the crisis of space, manifested from '70 until '85, produced the new center. The heritage management at the time represented a special case. Most of the historic facilities being functional, they were merely upgraded; new ones were built outside the heritage nucleus. Thus there was a coexistence of conservation and development interventions. The second threshold ('90), bringing small tourism units, remains focused outside the historic center - with outbreak of kitsch and the degradation of the built heritage. The engine of this development continues to be the balneal resource, the resort being the most sought-after tourist destination of the county (according to the Development study, Caraş-Severin). The lack of built heritage management policy led to a rapid and constant degradation over the past 10 years. In this context, the *museification* approach would be the best choice as a first phase of intervention; if the balneal resource is greatly renewable, once damaged, the strata of built heritage cannot be recovered. Alarm signal on the urgency of restoration was triggered by multimedia programs (popularization), intervention programs, interactive

projects RESTAURARE (2009) TVR (resulted in the restoration of Villa Elisabeta 1875, CS-II-mB-11 003), inventory campaigns INMI (ITER international project). The valorization of build heritage, in correlation with the natural resources (spa, landscape) represents a later phase, the *revitalization*. Active involvement is imperative – through events (see Terra Dacica Aeterna Association), temporary/permanent cultural events, outward-oriented targeted collaborations (see Development Strategy of Caraş-Severin-Vrsac-South Banat, Caraş-Severin County Council) and involvement of NGOs (workshops etc.).

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